



Tuck

IMPACT REPORT FY21

## REVERS CENTER FOR ENERGY

*A team of Tuck students placed second at the University of Texas McCombs School of Business National Energy Finance Challenge.*

### Executive Summary

During a time of global uncertainty and disruption, Tuck students proved to be resilient and embraced a variety of virtual learning opportunities. The Center kicked off the last academic year with a pre-term “trip” for the annual San Francisco Ecosystem Deep Dive (EDD) in partnership with the Center for Entrepreneurship. Three tracks consisting of Energy, Cleantech, and Entrepreneurship brought together 50 students in virtual groups from around the world to explore companies such as Cypress Creek Renewables, Elemental Excelsior, Calpine, Volta, Utility API, and 3degrees from around the Bay Area.

In preparation for the 2020 election, the Center hosted Colin Hayes, Energy Lobbyist, Lot Sixteen for a bipartisan discussion on how energy topics would influence the debate stage. Energy policy has always been a substantial factor in U.S. politics. It has evolved considerably over the years and, although it was overshadowed by COVID-19 during the debates, still factors in conversation around topics like climate change, energy security, or large-scale infrastructure innovation. These topics were also central to a discussion led by Jameela Pedicini, Executive Director of Climate Finance Initiatives, Bloomberg L.P. in September.

Among other highlights, a team of students virtually attended University of Texas McCombs School of Business National Energy Finance Challenge, taking second place, and placed fourth at both the Ross Renewable Energy and the Duke Energy in Emerging Markets case competitions. The Center also hosted the first annual Tuck Renewable Energy Finance Challenge. We are thankful for our generous partners who contributed to case development, funded prizes, and served as judges for the final competition.

“Coming from a background with almost no energy experience, being a Fellow was essential to my ability to discern between different opportunities and to find my career ‘pocket’.”

—Anna Douglas T’21



## Highlights

### First-Ever Renewable Energy Finance Challenge

In October 2020, the Center launched the Tuck Renewable Energy Finance Case Competition, the first annual sustainable energy case competition hosted by the Tuck School. The competition was designed to bring together creative and solutions-oriented teams to help a traditional oil and gas company assess what they can do to transition to long-term sustainable energy. Selected teams presented their recommendations to an expert panel of judges comprised of business leaders from Marathon Capital, New Energy Capital, Shell, and Swift Current Energy. The team that organized the student-led event included T'21s Tiago Lemos Franciscone da Rosa and Cristian Molina Cornejo, and T'22s Joe Dalton, Gautam Jagannathan, Alex Krass, Susie Peerson, and Michael Zanko. The quality of all presentations was impressive and the judging panel had to deliberate extensively, signaling the success of this inaugural competition.

### Tuck Carbon Offsets Project

The Center launched the Tuck Carbon Offsets Project in May with RCE Fellows Colin Cinder T'21 and Mark Orloff T'21. The program creates co-curricular experiential learning opportunities—bringing classes such as Business of Climate Change and Energy Economics to life—and reduces environmental impact around Tuck as well as global TuckGO locations. By purchasing carbon offsets, students contribute positively to the environment which can be local and further afield. The project provides skill-building opportunities for students interested in environmentally focused careers, including hands-on experience creating sustainability reports for distribution to alumni. The program also strengthens Tuck's position among peer schools, including the 15 MBA programs that have started a carbon offsetting process.



Colin Cinder T'21, RCE Fellow



Mark Orloff T'21, RCE Fellow

### The Tuck Energy Currents Podcast

Led by Eric Lukas T'21, the podcast explores career paths and industry trends across the energy sector. Each episode features an interview with energy leaders who share about their career journey, provide an overview of their business activities, note current trends impacting their segment of the energy industry, and discuss leadership lessons. Guests include seasoned professionals as well as recent business school graduates. So far, they have included developers, strategists, bankers, investors, and entrepreneurs.



## Student Experience

### Student Perspective: Ayo Adare T'22

Adare, who holds a graduate degree in power systems engineering, spent six years of his career immersed in advisory and infrastructure finance while working at PwC and InfraCredit. He worked on projects that cut across various sectors including power, renewables, oil and gas, transportation, and telecommunications.

He joined a group of eleven other enthusiastic energy-focused students for the Bay Area Ecosystem Deep Dive on Energy. During the course of the deep dive, he had the opportunity to meet seven companies in total—six in the power and energy space. The virtual tour of Lingrove by the CEO and co-founder, Joe Luttwak, provided insight into a sample facility of a startup clean-tech company in California, something Ayo was very interested in coming from a country with an underdeveloped power grid plagued with connectivity issues and power cuts. Students visited Elemental Excelsator, a company spurring many power and energy startups by granting them necessary seed financing and mentoring opportunities.



“I gained incredible insights related to the energy value chain from interactions with key companies and professionals, some of whom are Tuck alums.”

—Ayo Adare T’22



While at Tuck, Adare hopes to gain broader exposure to the energy ecosystem in a developed economy, nurture strong networks in the energy space, and get closer to achieving his long-term goal of a global career in power and energy with an impact across Africa.

### **Tuck ESG Investment Fund**

In September 2020, Tuck launched a student-led ESG Investment Fund. As the asset management industry is racing to develop more ESG products and solutions to meet growing demand globally, business schools have an important role to play in developing the next generation of investment professionals who can readily and credibly assess long-term material ESG risks and opportunities. In coordination with Tuck’s Center for Business, Government & Society (CBGS), we launched the Tuck ESG Fund to put a focus on developing this next-generation investment professional—expanding the pool of human capital that will be required to build a more sustainable future.



*Last fall, a team of students (pictured) launched Tuck’s first student-led ESG Investment Fund.*

The goal of the independent study project was to actively manage the Tuck ESG-oriented portfolio in a manner consistent with the asset management industry’s best practices, while integrating ESG screening in the investment. ESG investing has evolved rapidly over the last few years and has so much to offer in terms of academic and professional growth for students. This “action-based learning” that the fund provides an opportunity that cannot be easily replicated in the classroom.

### **Tuck Team Takes 2nd at National Energy Finance Competition**

Representing Tuck at the University of Texas McCombs School of Business National Energy Finance Challenge were Rishab Bansal T’22, Philip Munyao T’22, Umut Asikoglu T22, Caleb Dorfman T’21, and Jacob Holzhauser T’22. The Center supports annual attendance at the case competition by selecting students with diverse skills to attend on behalf of Tuck. In a typical year, the Center combines attendance at the competition with company visits to Houston-based energy firms that connect students with our network of Tuck alumni.

Competing with thirteen peer schools including Booth, Kellogg, and Duke, teams address real world financial and strategic issues confronting a hypothetical company in today’s dynamic energy landscape. Each team has a long weekend to work on their analysis before presenting their plan the following week to a panel of senior executives from a variety of leading companies in the energy and financial sectors. Five students hailing from four different countries, the team came together as “Nishati Energy”, embracing its diversity and using the Swahili word for energy in the team’s name. “My time at Tuck is about growing professionally and building lasting relationships; through Nishati Energy I did both,” shared Jacob Holzhauser T’22 about the experience.





### Launch of the Future of Automotive Mobility Club

Sammer Richi T'21 launched Tuck's newest career-focused club which considers the "radical new technologies that will transport us from A to B in the not-too-distant future." "The Revers Center has been incredibly helpful in marketing our club to the Tuck Community, providing logistical support, and introducing us to members of the wider Dartmouth community that are passionate about what our club is pursuing," says Richi. The club was designed to help students learn about, interact with, and pursue employment in the automotive and mobility industries. The club worked with the Center to co-sponsor a series of events throughout the year, including:

- **Power-Up Monday Electric and Autonomous Vehicles 101** with Sammer Richi T'21 and Sarthak Vaish T'21
- **Financing the Future of Automotive Mobility with Panel** with Richard Hawwa, Citibank, John Casesa T'86, Guggenheim Partners, and Matthew Fisher, Zoox
- **Goodbye Gas?** Club event with Sammer Richi T'21
- **Industry Panel: The Future of A to B** with Motor Trend Editor-in-Chief Edward Loh, YouTube sensation and carsandbids.com founder Doug DeMuro, and The Fast Lane Truck Managing Editor Andre Smirnov.



*Founded by Sammer Richi T'21, the Future of Automotive Mobility Club hosts programs that explore the future of the automotive and mobility industries.*

### Engaging Experts: Speaker Series

The Center collaborates with partners across Tuck to bring experts in to meet with students in panels, as guest speakers in the classroom, and in small group settings.

- **Renewable Energy and Infrastructure Finance Workshop** with Cesar Torres, Senior Investment Associate, NextEnergy Capital
- As part of the Tuck Emerging Markets Conference, **Importance of Regulations for Renewable Energy in the Emerging World** featured panelists Atem S. Ramsundersingh, CEO, WEnergy and was moderated by Caleb Dorfman T'21.
- The **Annual Tuck PEVC Conference** featured three energy-focused panels: "Investing in Infrastructure and Real Assets" moderated by Cristian Molina Cornejo T'21; "Private Equity Investment Trends in Energy" moderated by Eric Lukas T'21; and "Climate Tech and Sustainability in Venture Capital" moderated by Tobin Krieg T'21.
- **Putting A Price on Nature: The Role of Natural Capital in the Fight Against Climate Change** featured keynotes by Gretchen Daily, co-founder and faculty director of the Natural Capital Project at Stanford University and Kathy Baughman McLeod, Senior Vice President & Director of the Adrienne Arsht-Rockefeller Foundation Resilience Center. Tuck's CBGS and the RCE collaborated to bring together industry experts for discussions on the role of finance in the valuation and preservation of the natural world. Led by Ed Beshers T'21 and T'22s Alex Krass, Andrew Wood, and Jake Ochroch, the summit explored a variety of topics including carbon capture, water credits, and the community impacts of those projects driven by a guiding question of the role of capital markets in the fight against climate change.

"I came to Tuck, in part, because of its strong network in the renewables space."

—Tiago Rosa T'21





## Energy Fellows Program

The Energy Fellows are the hallmark of our programming. These second-year MBAs work with Center leadership and Tuck faculty, staff, and alumni to customize their MBA experience. These students pursue opportunities both within and outside the classroom that will prepare them for careers across the energy industry.

When asked about his favorite memory as a fellow, Warren King T'21 shared: "Working with the New Hampshire Electric Cooperative to help them develop a carbon reduction strategy as part of my Fellows project was definitely a highlight. It was an opportunity to work on an issue I am passionate about, while applying the skills I learned in school, and having an impact on the community in which I have lived for two years."

Key programs include our Energy Leaders Lunches where we host CEO's from across the industry to frame a key leadership challenge, and describe how they managed and led their teams to success (or failure) in a small group setting with our fellows; an Executive Mentorship Program where we match our fellows with industry leaders for a 16-month long mentorship to help guide career planning and offer perspective on balancing life and a career; and a Fellows Experiential Learning Project, or FELP, which is an independent study or project with a company over 1-3 terms diving deeper into the business of energy in preparation for their career transition into a field such as finance, operations, etc.

### Careers in Energy

The Center supported four summer internships in sustainability roles with start-ups or not-for-profits, through the Thad T'95 and Margaret Hill Career Exploration Fund. Through the experience, students had the opportunity to explore a variety of energy-focused roles and career opportunities.

### Energy Leaders Mentorship Program

Since 2016, this signature program has paired Revers Energy Fellows with successful energy industry leaders. The objective of this program is to cultivate a strong network and community of Tuck energy alumni. This program facilitates a transfer of knowledge, wisdom, resources, and life experiences. It creates lasting, meaningful mentorship relationships through a two-way dialogue that extends far beyond the duration of the program.

Mentors this year included:

- GE Canada President and CEO Elyse Allan D'79 T'84
- Cleantech CEO and Venture Advisor Mike Miskovsky T'90
- Calpine CEO Thad Hill T'95
- Infra-Energy Capital Advisors Managing Partner Grant Davis T'85
- Spruce Finance Co-Chairman and CEO Christian Fong T'05
- Environmental Impact Acquisition Corporation Chairman David Brewster T'02
- Morgan Stanley Power & Utilities Managing Director Jon Fouts T'92
- Great River Hydro President and CEO Scott Hall
- Microsoft Renewable Energy Director Kourtney Nelson
- Clean Marine Energy Co-Founder and CEO Pace Ralli T'09
- Google Nest Head of Product Marketing – Energy Jess Gunter T'09
- Northbridge Partner Scott Fisher T'98
- Verogy Co-Founder and CFO Alex Figueroa T'10



*GE Canada President and CEO Elyse Allan D'79 T'84*

## Leadership and Collaboration

### Dartmouth Energy Futures Conference

The Center was proud to co-host Dartmouth's inaugural energy conference, Investing in Our Energy Futures, which convened experts from around the world to focus on the urgent energy question of our time: How can we shape our energy investments to simultaneously provide adequate energy access to all people and address climate change to ensure a sustainable environment for future generations? The conference explored opportunities and challenges related to worldwide investment in energy systems through financial, societal, and human capital.



*Daniel Revers T'89, one of the featured speakers at the Dartmouth Energy Futures Conference, received the Tuck Distinguished Achievement Medal at the 2021 Tuck School Investiture Ceremony.*

Keynotes and panels across the three-day event examined:

- Investing to meet both increasing energy demand and climate targets
- Emerging technologies and the changing fossil-renewables mix in different contexts
- Advancing social justice and global energy access
- Developing energy leaders, and other important issues within energy

Speakers included Tuck alumni Elyse Allan D'79 T'84, Director at Brookfield Asset Management; Scott Fisher D'93 TH'93 T'98, Partner at NorthBridge; Sarah Irving D'10 T'14, Executive Vice President at Irving Oil; Darren Peers D'96 T'01, Analyst at Capital Group Companies; and Arclight Capital CEO and Co-Founder Dan Revers T'89. Other notable speakers included Jigar Shah, Executive Director of the DOE Loan Programs Office; Jeanne Shaheen, US Senator; and Philip J. Hanlon D'77, Dartmouth President.

### Across Dartmouth: MBA Student Careers in Energy Panel

The Center hosted a Careers in Energy Panel where Tuck students shared various career pathways in energy with a Dartmouth undergraduate and prospective student audience. Six Center Fellows shared their energy career pathways after their undergraduate education and their plans for post-MBA. The session explored a variety of energy fields: banking, consulting, entrepreneurship, environment, engineering, sustainability, and utilities.

### Dartmouth Energy Collaborative Partnership

The Center continued to partner with the Dartmouth Energy Collaborative (DEC) for programming that included Lunch & Learn events throughout the year. The Center co-sponsored an event on the "Health Impacts of Air Pollution" featuring Laura Paulin of the Geisel School of Medicine. In addition, this year we piloted a Tuck Student Careers in Energy Panel with five T'20 Fellows from a variety of energy backgrounds who talked about their experiences with Dartmouth Thayer School of Engineering and Dartmouth undergraduate students.

### Climate and Clean Energy Youth Forum

The forum was organized around the belief that climate change and environmental justice are among the most pressing issues of our time. Convened in March 2021, its aim was to engage students and young professionals with regional and national climate leaders, New Hampshire's congressional delegation, scientists, business leaders, and environmental justice champions. The goals were to raise awareness about the implementation of climate and clean energy plans, discuss intergenerational science and policy opportunities for environmental justice, and explore job growth potential in an emerging clean energy economy.





## Curricular Connections

### Energy Economics

Professor Erin Mansur

This course introduced students to energy markets, including structure, competition, investment, and regulation, as well as strategy and policy. Students ended the course with a deeper understanding of economic determinants of industry structure, the evolution of competition, drivers of supply and demand in various markets, the roles of storage and transportation, market power and antitrust concerns, and the rationales for economic and environmental regulations.



*Revers Professor of Business Administration Erin Mansur*

### Business and Climate Change

Professor Anant Sundaram

Climate change and its impacts raise momentous concerns. There is an emerging, multi-trillion dollar “climate economy” that will mitigate and help us adapt to climate change. The class discussed the impacts of climate change on business, tools, and frameworks to understand regulatory responses, and ways to assess how a company’s business model is exposed to climate change.

### Independent Study Projects

All students at Tuck, both first and second years are welcome to take on an energy related independent project with the support of the Center. These projects provide training in critical thinking and often impact the local community or a business. Center Fellows will also take on an independent project during their second year. Independent study projects included:

- Microgrids and Utilities: Threat or Opportunity?
- Tuck Carbon Offsetting Program
- Effect of Improved Battery Technology and Energy Storage on the Electricity Market
- PJM Electricity Pricing Under Various Scenarios
- UK Offshore Wind Tx Costs
- “Tuck Energy Currents” Podcast
- Energy and Gender Equality: Energy poverty has the face of a woman
- Vestas Wind Systems
- Renewable Energy Finance Case Competition
- NH Electric COOP - 2050 Decarbonization Strategy
- The Future of Energy Private Equity Investments



*Revers Center Fellows celebrate at Tuck Investiture 2021 with RCE Faculty Director Erin Mansur.*

