by Michael W Toffel

# Educating Students and Professionals on the Business Implications of Climate Change

As climate change poses unprecedented challenges and opportunities, the private sector must play a pivotal role in both adaptation and mitigation efforts. This article discusses the new Harvard Business School Online course, Business and Climate Change, designed to equip participants—whether full-time students or professionals—with practical tools to understand how companies are addressing climate-related risks and opportunities. After introductory coverage of climate science and government policies, the course introduces a range of managers from companies around the world and across different sectors to explain how they are enacting practical solutions to improve their climate adaptation and decarbonise their products, operations, and supply chains. With engaging videos, short readings, and exercises, the course seeks to enable future leaders to integrate climate solutions into core business strategies, product and service design, operational decisions, and more. Given the increasing demand from Gen Z and Millennials—and MBA students—for meaningful, impactful careers, the course addresses an urgent need to align business education with the realities of a changing planet

The physical manifestations of global climate change are disrupting communities, power systems, and businesses, and will likely require trillions of dollars per year of investment in adaptation and resilience measures. Moreover, addressing transition risks by developing new business strategies, products, and services and changing operations and supply chains to meet climate-related regulations and customer preferences provide a multi-trillion-dollar opportunity. As the World Economic Forum notes, these challenges are "too big, too serious and too urgent" to rely solely on public institutions. With over $210 trillion in global assets, the private sector can drive solutions in clean energy, sustainable transportation, green building, smart agriculture, and more resilient infrastructure. Success hinges on professionals being equipped to develop and scale these climate innovations.

A growing number of MBA students are excited to meet this moment, with many wanting to deploy what they learn in business school to build business careers in addressing these climate change challenges. This calls for business schools to equip their students with the necessary skills and knowledge to do so both in their core curricula and elective courses. To that end, my HBS colleague Professor Forest Reinhardt and I have developed a new Harvard Business School Online course called Business and Climate Change to provide students around the world with practical tools to understand what's going on, why, and how businesses can and are responding by managing climate risks and opportunities.

## Teaching students the business case for taking on climate change

HBS Online launched the first 'wave' of this course in March 2024, and launches new ones every few months to enable participants to choose a suitable time of the year when they can dedicate the necessary five hours per week over a five-week period to completing the course.

Week one covers the science, economics, and policies of climate change to explain why climate change is happening, how it is affecting the economy, and why governments have struggled to put in place effective laws and regulations to address it. Weeks two and three address the physical manifestations of climate change, from wildfires to the rise in sea levels, and how some companies are developing adaptation strategies in response. Participants learn adaptation approaches from managers at companies in a wide array of sectors including agriculture, health care, hospitality, real estate development, seafood, investor-owned utilities, and reinsurance. Weeks four and five delve into climate mitigation or decarbonisation, and examine how companies can accurately measure their carbon impacts in their operations and supply chains, and can develop initiatives to reduce those emissions such as by redesigning their products and services, identifying new investment opportunities, and transforming their supply chains. Examples are drawn from companies in consumer-packaged goods (CPG), transportation, agtech, and other sectors.

The course provides readings, videos, exercises, short writing assignments, and multiple-choice quizzes. Students work at their own pace each week but need to complete all of that week's assignments before moving on with their cohort to the following week's assignments. This cohort model allows participants flexibility to engage in much of the material individually, while also providing the opportunity to meet and learn from others in the cohort by reading and commenting on some of their responses and by receiving feedback from their peers.

Participants examine how companies are engaging in both adaptation strategies that help them adjust to an already changing planet, and mitigation strategies to reduce emissions. In doing so, the course eschews the outdated and false debate between adaptation vs. mitigation; the IPPC itself has long insisted that neither one is sufficient to address climate change.

Those who have completed the course so far are from a wide range of countries, including wealthier nations in North America, Europe, and East Asia - major investors and early markets for many decarbonised products - and from poorer nations in South Asia and South America that are the most vulnerable to many climate change impacts. Their feedback has been very encouraging. For example, after completing the course, Rebecca Bullen noted that "it helped improve my baseline knowledge and gain a better understanding of global efforts to adapt to and mitigate climate change. Especially for someone just entering the professional world, I feel like this course was helpful in discerning future professional goals." She noted that it helped her gain confidence and "felt like I was working toward a tangible goal." Others have appreciated the course's practical and applicable insights that can be immediately implemented across a range of industries.

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## A tool for business school educators and students

The launch of this Business and Climate Change course comes as business schools are at an inflection point. While MBA graduates from top business schools over the past decades often pursued careers in management consulting and investment banking, many of today's are seeking careers that enable them to engage with and create positive impact on the biggest environmental, social, and technological challenges facing their generation. According to a Deloitte survey published this year, the majority of the 22,000+ Millennial and Gen Z respondents from 44 countries indicated that they have felt "anxious or worried" about climate change over the prior month. Two in 10 said they changed jobs to work for employers whose environment

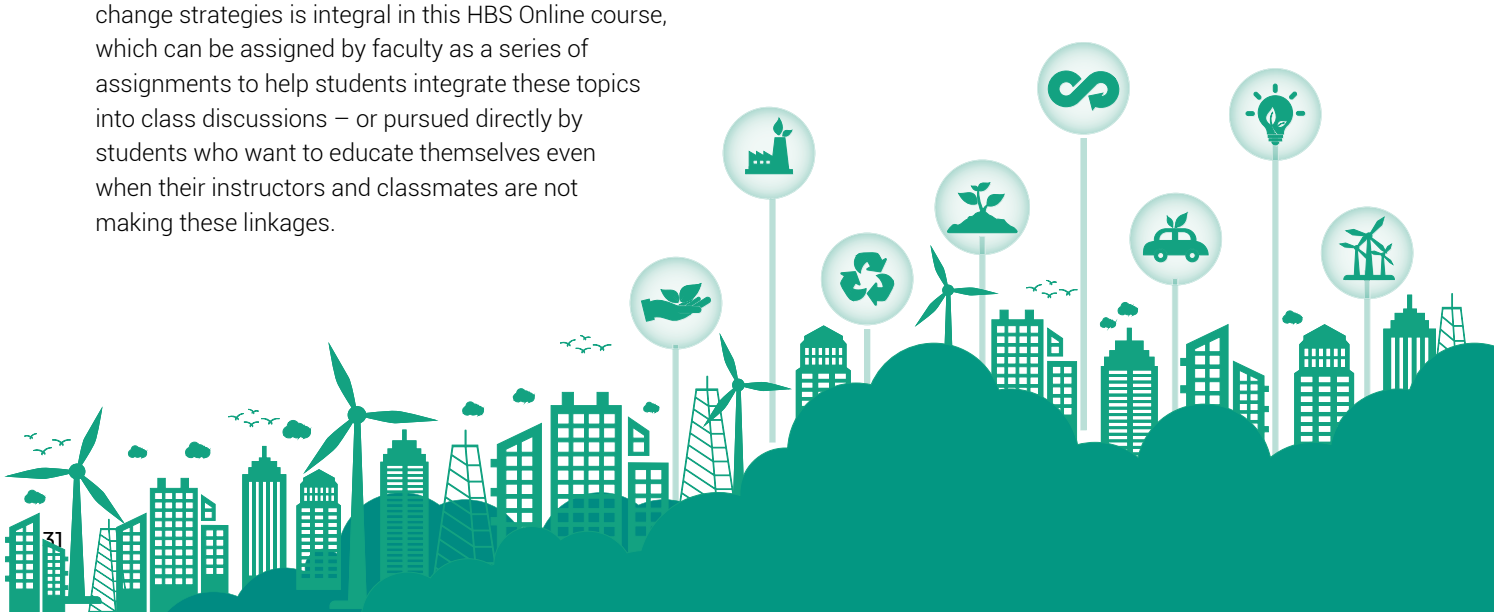
values matched their own, and another 25% said they planned to do so in the near future. A quarter of these professionals reported researching a company's stance on environment activities and policies before accepting a job offer. Companies that shy away from integrating climate change into their core strategies risk missing out when recruiting the next generation of talent. Indeed, many leading management consulting firms are themselves developing practices to help clients navigate the climate transition.

Part of the shift in prospective students' attitudes toward what makes a compelling career is evidenced by the emergence of the Climate Legacy Commitment, a programme launched by two recent MBA graduates from the University of Cambridge Judge Business School that encourages students at top-ranked business schools on both sides of the Atlantic to commit to "championing sustainable initiatives, practices, and solutions, leveraging our influence to transition our businesses, communities, and networks towards a net-zero future," among other things. (Similarly, ClimateVoice encourages employee engagement to advocate for their employer to adopt pro-climate government policies.)

A global problem on the scale of climate change requires both broad knowledge of the underlying causes along with the development of skills so that MBA graduates are prepared to face such challenges on behalf of their future employers.

Educating students on the business implications of climate change ultimately requires going beyond offering electives that attract the subset of students already interested in the energy transition, climate finance, and sustainable operations – as important as those are. It also requires understanding why and how the physical climate is changing, and how the emerging new patterns of storms, heat waves, droughts, and floods will affect the stability, costs, and even viability of operating at various locations around the world, because while climate change is global, its implications will be highly regional. Students need to understand how climate change will play out differentially over time and space, and become familiar with new tools that map climate model predictions. These changes will have dramatic implications for many aspects of companies, such as the demand for their products and services, the stability of the communities and infrastructures upon which companies' operations rely, the new technologies companies will need to develop or acquire, how to bolster the resilience of their supply chains, and what public policies they might wish to advocate or oppose.

These topics fit neatly into today's core MBA curricula, including marketing, strategy, operations, finance, and accounting—but require greater awareness by faculty members of how to link their classic concepts to the new realities that climate change will bring. The fusing of traditional business solutions with emerging climate change strategies is integral in this HBS Online course, which can be assigned by faculty as a series of assignments to help students integrate these topics into class discussions – or pursued directly by students who want to educate themselves even when their instructors and classmates are not making these linkages.



This past summer, the Harvard Business School's Business and Environment Initiative offered our own MBA students the opportunity to take the course within a designated HBS MBA cohort, and nearly 50 students spent the required 25 hours over the summer to complete the course. Those students arrived on campus this fall much better equipped to bring climate change into conversations in their courses that address business strategy, product design, supply chain management, accounting, finance, government relations, and corporate ethics. For example, one of the first-year HBS MBA students who took the course over the summer before arriving on campus, Jack Senft, recounted a connection he made in class this fall: "We had a finance case on whether a homeowner should invest in solar panels, and I had the background from this course to say that it was more than just saving energy costs, it's also about subsidising future solar expansion for others and the community as a whole. It was really interesting having that deeper level perspective and getting to apply it."

As undergraduate business majors and MBA candidates increasingly seek careers where they can apply their management skills to address climate change, I hope that other business schools follow HBS by infusing climate change topics into their core curriculum. Understanding how climate change is shifting the natural capital underlying our economy, and demand and supply of goods and services is as important as providing our students with the skills and knowledge to thrive in a marketplace that is facing other dramatic shifts, such as in data analytics, digital transformation, and artificial intelligence. We should avoid looking back with dismay that we didn't adequately educate our students to prepare for the changes that we're seeing now and that will significantly affect so many industries during their careers.

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## About the author

**Michael W Toffel** is the Senator John Heinz Professor of Environmental Management and Faculty Chair of the Business and Environment Initiative at Harvard Business School.