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Sustainability: now or never

Business leaders are stepping up to tackle the most urgent environmental and social challenges

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Welcome

François Ortalo-Magné,
Dean, London Business School

What does sustainability have to do with business? Everything, it turns out. As the world's leaders gather at the UN Climate Change Conference (COP26) to discuss the most urgent environmental and social problems of our time, this issue of *Think* explores the role of business in finding solutions.

"Sustainability is the task of our generation," writes Ioannis Ioannou, Associate Professor of Strategy and Entrepreneurship, on page 24. "We need to leave the planet in better shape than we found it. The challenge extends to pretty much every aspect of our life right now – our lifestyles, our jobs, our economy."

With the right tools, frameworks and insights, business leaders prioritising sustainability are becoming a force for change, adding value for society and gaining competitive advantage, he argues. From starting new ventures aimed at tackling specific issues to embedding sustainability principles in business models and strategies, the business community is stepping up.

In this issue we hear from faculty and others in the LBS community who are applying their expertise to sustainability issues. They include Lucrezia Reichlin, Professor of Economics, on standardising corporate sustainability reporting; Rajesh Chandy, Professor of Marketing, on how marketers can use their influence for good; and Randall S Peterson, Professor of Organisational Behaviour, and Vyla Rollins, Executive Director of the Leadership Institute, on the difference that board diversity makes.

Give to LBS

I am so proud that many of our executive education participants, degree students and alumni are leading sustainability initiatives worldwide. It's a privilege to share some of their success stories here; some of them born on campus, such as Grape ESG, founded by Ione Anderson and Ricardo Assumpção after they met on the Sustainability Leadership and Corporate Responsibility programme.

Bringing diverse business minds together is our forte, which leads me to the new Institute for Entrepreneurship and Private Capital. A unique player in this space, the institute will convene LBS founders and investors, equipping entrepreneurs for success through research, teaching and events. I encourage you to read about their vision on page 18.

Onwards,

François

Five tips to land your ideal job

LBS Career Centre is committed to supporting students and alumni along their career journey, through coaching and learning as well as providing insights and sourcing opportunities. In this article we highlight five key aspects of the job-search process

1 Identify your transferable skills and leadership style

Although technical skills are important in changing jobs within a specific function or sector, transferable skills are non-technical competencies that enable us to progress and transition careers. There are many ways to look at transferable skills, but one way to group them broadly is as follows:

Interpersonal skills are those that enable you to engender trust and develop relationships. Teamwork and stakeholder management are important components of this category.

Communication skills include listening as well as talking; being mindful of body language and facial expressions. Presenting is important, but the thought that goes into a presentation is as critical as the performance itself.

Insight covers the leveraging of your domain knowledge: innovation, strategic thinking and problem-solving. What do you do with your knowledge – how do you use it to benefit your employer?

Judgement is how you think, reach conclusions and make decisions. Are you thoughtful and thorough? Fact-based or intuitive? Do you have commercial awareness?

Your leadership style defines how you lead. Many of us like to think of ourselves as visionary, democratic and empowering. We also occasionally need to be authoritative, decisive and challenging. There are many aspects to leadership: which do you excel in?

To identify your skills and style, write down everything you have accomplished and how. Then practise articulating your top skills and style in bite-sizes of 90 seconds. This will set you up well for drafting your CV and cover letters, and for networking and interviewing.

2 Believe you can make an impact

The most common question we hear in the Career Centre is: "Do I have the right background?". If you're asking yourself this question, you may be lacking in confidence. The reality is that your background is what it is. You cannot change it. You therefore must believe that, whatever your background, you have (or can easily acquire) the transferable and technical skills to make an impact in your next role. If you cannot convince yourself of this, you will not convince an interviewer.

To start, find a thread through your prior roles that leads to whatever job you want to do next. Usually, this will be a set of transferable skills that you have developed, coupled with a deep interest in the business of your target organisation. Skills plus commitment = ideal employee!

Then think about your achievements in your current and past roles. What were they and how did you accomplish them? What was the impact on the business and how did you, and your organisation, grow as a result?

Finally, ask yourself what you want to achieve in your next role. What tools will you need? How long will it take? How will this benefit your prospective employer? Defining and articulating the impact you can make will help demonstrate that you understand your target organisation's needs.

3 Be curious

There is nothing wrong with focus in a job search. Many people will advise you to decide what you want and go for it, and nothing else! That's fine – except you may not know what else is out there and how else you can put your skills to productive use. Dividing your job search into four categories can help:

- what I know for sure I want to do
- what else I know I can do
- recommendations from others who know me
- alternative opportunities that look interesting.

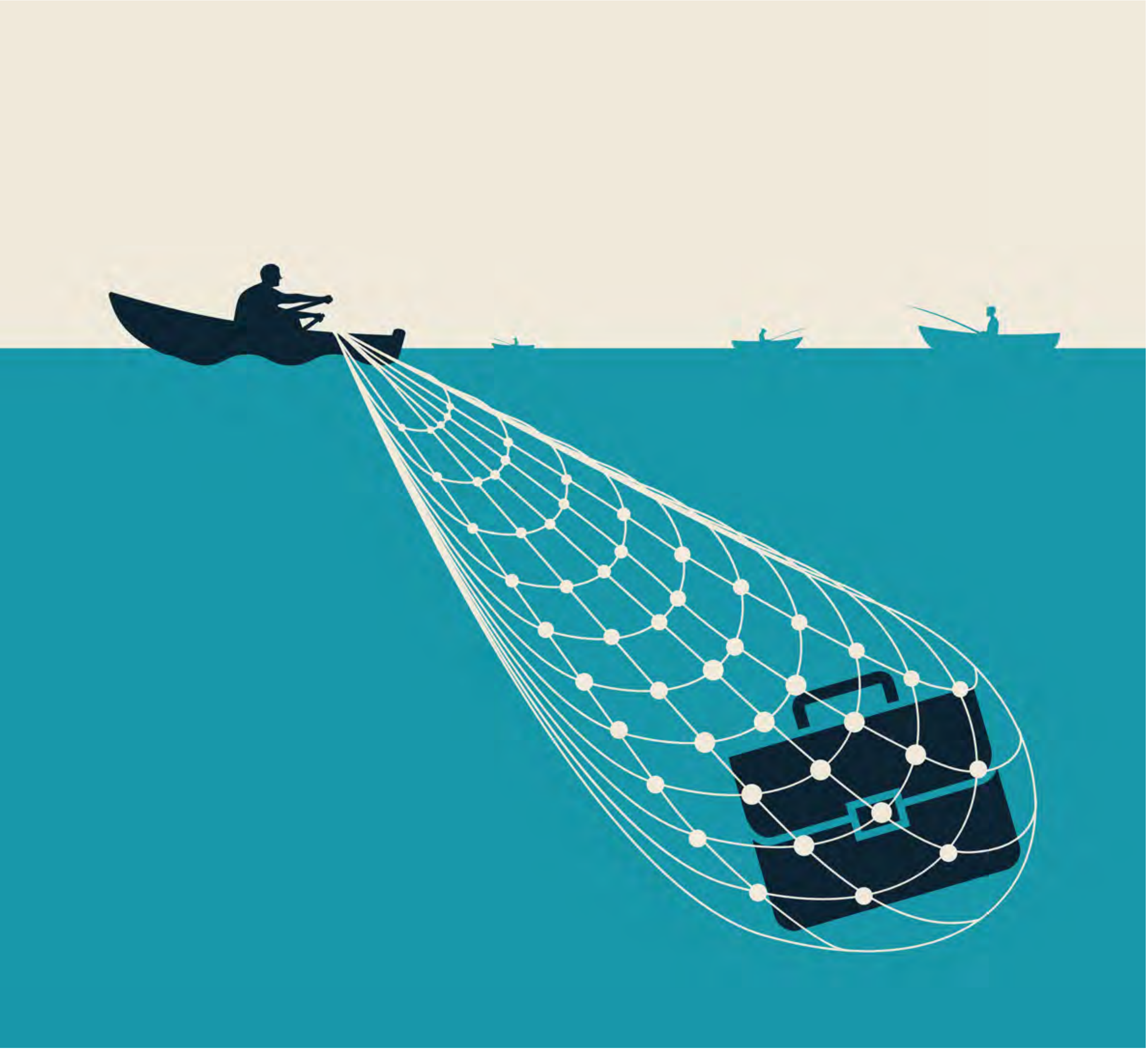
These options are not in order of priority. They are simply equally valid alternatives that might lead to a positive and happy outcome, irrespective of your starting point.

Researching and identifying roles and opportunities within each of these categories and assigning a probability to them, given your transferable skillset, will open your mind to a much wider set of careers than you can ever have imagined. When looking at roles in any of the above categories, highlight the skills you have in green and those you don't in red. You are probably the right candidate for many more jobs than you think!

4 Network for insights

Networking is the lynchpin of any good career. We network instinctively without knowing it. Yet, when we're asked to network proactively, we often freeze! To overcome this aversion, think of networking as relationship building rather than job hunting. You're more likely to get a meeting with someone if you offer to share something interesting. But if you simply write to them asking for a job, the likelihood is they will ignore your request or pass it on to HR.

WORDS: CHRISTIAN DUMMETT ILLUSTRATION: EDUARDO LUZZATTI



Once you have your meeting, go prepared. Be clear as to what you want to find out and what you can share in return. Above all, leave a strong impression so that your host will pass your details on to someone else. After the meeting, thank your host and let them know what you plan to do next. That will give you a good reason to go back to them in the future. In short, make them feel good that they have helped you. In turn, they will think well of you!

5 Let the job find you

Applying for advertised jobs is something of a lottery as you're likely to be competing with multiple applicants. But if someone specifically asks you to apply for a job, they likely have you or someone with your characteristics in mind for a vacancy. They may even create a job just for you. It does happen!

Headhunters often reach out to the market to ask 10 people if they know 10 people who might be suitable. This gives them a pool of at least 100 applicants to consider. If you have networked well, your name might be put forward. Indeed, any time you network you're really looking to tap into someone else's network. If you reach out to 10 people and leave a good impression, they might collectively pass your details to 100 people they know who have a job that's right for you! It is not who you know, it is who knows you that matters.

Networking enables you to tap into a hidden job market where candidates are referred to jobs, by recommendation, that they would otherwise never have heard about. □

Christian Dummett is Executive Director, Head of Career Centre at London Business School.

The A-Z of ESG

Grape ESG co-founders Ione Anderson and Ricardo Assumpção discuss meeting at LBS and what the future of sustainability looks like for South America

Grape ESG is one very exciting company. Bringing together academic excellence and industry expertise, it guides organisations towards more sustainable practices, while working with boards to create long-term value for them and their shareholders.

The founders, Ione Anderson and Ricardo Assumpção, met during their time at London Business School. They were both taking the Sustainability, Leadership and Corporate Responsibility online programme and both keen to improve awareness of environmental, social and corporate governance (ESG) issues in their native Brazil: it was almost inevitable that they would start collaborating.

We asked Ione and Ricardo about the highs and lows of launching their sustainability consultancy and what impact LBS has had for them.

Different backgrounds, one shared vision

With a background in science and journalism, Ione had spent years working as an international civil servant, with a focus on sustainable development and protecting biodiversity from climate change. Over time, she had also become increasingly interested in the role of the private sector in driving sustainability projects. "There's so much siloed working," she explains. "I'd worked with UN agencies and other international organisations, but we never had much interaction with the corporate world. I was very curious about that side of things."

During her research, Ione came across a paper by Dr Ioannis Ioannou, Associate Professor of Strategy and Entrepreneurship at LBS. She reached out to him in 2017 and they began discussing what different companies were doing to combat climate change. "It was really, really interesting to hear what all these different organisations were doing – things that we just don't have the resources for in the public sector. So, two years later, when Ioannis let me know he would be creating a programme on sustainability leadership, I enrolled right away."

On the other hand, Ricardo, a serial entrepreneur, was already embedded in the private sector when he applied to LBS. After founding his first company, a strategy consulting firm, in 2006, he worked across various areas of strategy, communications and government relations for more than a decade. He was always committed to choosing sustainable projects, but says he wanted to improve his leadership skills. "I was always very focused on what the legacy of our work was going to be, what kind of positive impact we could leave behind. But I sometimes lacked confidence in my own sustainability leadership abilities, so I was looking for something that would help me fill those gaps."

In the end, it was a recommendation from a friend who had previously studied under Dr Ioannou that convinced Ricardo to choose LBS. "I had mentioned to this friend that I was looking at a few different places and he asked who was teaching the LBS programme. When I told him it was Ioannis he told me I had to apply; they'd actually been in Silicon Valley together as part of the LBS Sloan programme. He assured me the programme would offer the mix of sustainability and innovation I was looking for."

WORDS: ROSIE PARRY PHOTOGRAPHS: BEATRIZ BARROS, ERIKA SCHEEPMAKER

From classroom connection to co-founders

What initially drew them to each other? "Well, we were two of probably only four Brazilians on the course," Ione laughs. The pair began to exchange papers they were reading and continued discussions after class. Before long, they began writing a policy brief together (soon to be published), which included their perspectives on key sustainability issues, leaning on their respective backgrounds in science and business.

Ricardo was especially interested in Ione's scientific background: "I had gained a lot of business knowledge and management skills over the course of my entrepreneurial career, but I'd never had a solid grasp on the science. Finding somebody who could bring that perspective to the table was key for me."

For Ione, it was Ricardo's experience in business and management that made her feel they could succeed: "I really do believe, especially in our post-pandemic world, that the strongest opportunities for sustainable development will come from innovation. The public sector has been hit so hard by COVID-19, it simply won't be able to move anywhere near fast enough."

Ricardo had already been using lessons from the programme to inform conversations with his existing clients. Based on learnings from the programme, he started to develop a methodology to show them how it was possible to create value and drive innovation by integrating sustainability into their strategies.

When he and Ione decided to start their own consultancy firm, things moved fast. Grape ESG was founded in October 2020. Reflecting on their chance meeting, Ione says, "LBS is the kind of place where partnerships like ours are made possible. I feel like this is partly because the School encourages collaboration, but also because the people you meet here are genuinely invested in their studies and careers. Sustainability is something we've both always been passionate about – but it was only when we followed our passions to LBS that we were able to take the next step, forming our partnership and founding Grape ESG."

Making the case for ESG in Brazil

Despite being up and running for less than a year, Grape ESG has been featured in national and international news outlets – including the Financial Times. But despite the buzz, they're extremely selective about which clients they choose to work with. As CEO, Ricardo is leading Grape ESG towards an ambitious goal: to be the most respected sustainability consulting company in Brazil. That means sticking firmly to their convictions.

> 'We don't have to solve these problems one at a time. We can use developments in newer fields to solve our old problems'

He explains, "We're very upfront with potential partners. We need to know that they're in it for the long haul, that sustainability will be part of their DNA. If they tell me they're looking for quick results, that's fine, but I let them know we won't be able to work together."

What have been some of their biggest challenges? "In Brazil, ESG isn't yet a mainstream idea like it is in the US or the UK," Ione says. "There are other, equally pressing, socioeconomic issues, such as inequality, unemployment and a lack of infrastructure and education that impact our stakeholders."

Looking for a way to craft a relevant message and talk directly to Brazilians, they turned their attentions to a simple example with a global reach: the plight of the Amazon rainforest. Rather than rehashing messages of impending doom, Grape ESG partnered with LBS to produce 'Amazonia 4.0: The Reset Begins'. The short film, which was launched on Earth Day 2021, tells a more hopeful story of a future in which innovative bioindustries could not only protect native communities and ecosystems but drive economic opportunity across the region.

It's this belief in marrying remedies to sustainability issues with potential opportunities for economic growth that Grape ESG believes will be key to driving change across South America. "I do believe it is important that we all understand the impact of our personal choices on the world around us," Ione says. "But there are so many other ›

New solutions for old problems: Cultivating mussels using photovoltaic panels in Suqian, China, and (below) the Café da Margem zero-waste coffee shop in São Paulo, Brazil

pressures here. We have to be communicating a positive message to people. We need them to be inspired, to understand how addressing these big sustainability issues could improve their lives too."

Ricardo agrees, "We can't start talking to people about using water to create renewable energy until we address the fact that 30 million people here have no access to portable water." Building awareness of ESG issues while such stark structural inequalities still abound is a daunting challenge, but Ricardo also believes this is where the most exciting opportunities lie. "We don't have to solve these problems one at a time. What's great is that we can use developments in newer fields, like renewable energy, to solve our old problems."

This dual approach is useful for clients, too. "Especially now that the pandemic has reminded us how fragile life is and has brought sustainability issues front of mind for many people, we're reminding our clients that a more sustainable approach isn't just the right thing to do, but a positive differentiator for their business."

That belief is also the driving force behind their 100% sustainable coffee shops. Café da Margem ("riverbank café") offers the people of São Paulo a best-practice example of a zero-waste circular economy in action – and great coffee to boot. Grape ESG plans to scale up the coffee shops across Brazil and, eventually, globally.

One year on, a lifetime to go

At COP26 in Glasgow, where sustainability and climate change promise to snatch news headlines for two weeks, Grape ESG will also be present: they have led the efforts that resulted in a partnership between a Brazilian company and the UN Climate Change to explore issues such as water security and waste, and water management.

Not only has Grape ESG already attracted big-name clients such as Braskem, Sabesp, Ambipar and Nestlé; their creative and engaging approach to raising awareness has earned them three international

best short documentary and best environmental film awards and a Climate Change Communication Award nomination for Amazonia 4.0. "We're really excited about that," says Ricardo. "We always wanted to get the communication aspect right, so it's great to be recognised for something we're so passionate about."

It's their infectious passion and positivity that Ione believes has carried them through the last year. "Starting a new organisation is challenging, of course. But passion and professionalism are contagious. We understand that the transition to this way of operating is daunting for our clients – they're having to balance everything against their bottom line." How do they keep nervous clients on track? "We can give them all the evidence, but so much of what we do is just reassuring them that there is potential for growth. That's why our motto is 'Inspiring sustainable thinking'."

Their studies at LBS might be over, but there's little chance of Ricardo and Ione losing touch with Dr Ioannou: he now sits on the board of Grape ESG. "We've been so lucky to have some really amazing appointments," Ione says, "but Ioannis joining us felt particularly special. It's like coming full circle." □

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A hobby that saved lives

Amine Arezki EMBALS2022 explains how he helped invent a 3D printable mask that was produced cheaply across five continents at the height of the COVID-19 pandemic

When the COVID-19 pandemic hit last February, Amine Arezki found himself glued to the TV, watching the ramifications unfold as the first signs of the shortage of personal protective equipment (PPE) emerged.

"There was so much drama around it," Arezki recalls. "You could switch to any channel and the topic was the mask. One day you'd hear that we don't need the mask. The next they said we had to wear one."

Panic-buying had decimated the global supply of PPE and governments had instructed all retailers to reserve production for frontline healthcare workers. The US Surgeon General tweeted: "Seriously people – stop buying masks. They are not effective in preventing the general public from catching coronavirus…"

"There were a lot of statements like that," says Arezki. "But what became apparent was that there was this worldwide shortage of masks. Everybody was worrying about the situation and left to fend for themselves. I saw people in the streets attaching strange things to their faces – plastic bottles, plastic bags, water coolers, orange peel – just to protect themselves."

Aside from the misinformation overload, Arezki noticed that China and India were the main suppliers of the masks, and that transportation of the product had ground to a halt. "I thought, 'Why don't we start producing the mask in Europe? At least for a short period.' I have skills in designing something in 3D – it's my hobby – so I made the first mock-up." This was the genesis of A Mask for All: a three-person project to provide a 3D printable mask for free.

Arezki, a French-Algerian based in Stuttgart, Germany, met the other two people who would be fundamental to the project during an open Zoom call organised by GoFundMe CMO Musa Tariq on 20 March, 2020. One was Tito Melega, former chief creative director of Ford, based in LA. The other was Justin Nussbaum, founder of a 3D printing startup in Tennessee.

One goal

"The three of us realised we all had the same goal," recalls Arezki. "We started meeting online every day around 7pm. They were doing their stuff in their time zones; the next day I'd get their feedback and do my task. It was rolling out very, very efficiently. One thing we agreed on from the start is that we didn't want to compete with businesses which made approved masks for medical use. We weren't doing this to earn money, but to help people. We put out that design, licence-free, so anyone who had a 3D printer, or knew someone with one, could use it. There are millions of 3D printers in the world, so we figured if each one printed 10 masks a day, that's already a lot."

After working day and night for just one week, they had the first prototype and said: "We have to launch it now."

The mask was launched on 28 March 2020 on a budget of $0. Advertising, PR and webinars were supplied by "a lot of partners who were supporting us for free", including the Hollywood actor Pamela Holt, who made a video on how to use the mask.

Within a week, it was being printed across five continents, in "countries you'd never think of," says Arezki. "We went from being a centralised production unit to a factory spread around the globe. Even during the first few days we had thousands of downloads. A lot of people were reaching out to us, including hospitals."

Scalable to fit different face sizes, the mask also has impressive green credentials. "It's not something you use once and throw away. It's durable, you can put it in the dishwasher, sanitise it, change the filter."

A month after its launch, Arezki received a call from a GP in Milton Keynes, Buckinghamshire, with an interesting request. "She said, 'I like the design of your mask, but we work in an environment where we have people with hearing difficulties who can't lip-read if a mask is covering our mouths. Can you make your mask transparent?"

Arezki, Melega and Nussbaum quickly rose to the challenge and created the transparent version. 'AMaskForAll-Smile' was launched in May 2020. As well as helping the hearing-impaired feel less isolated, it has been used to aid autistic children, who lip-read as they often can't sustain eye contact. "If masks are going to become an everyday accessory in this world, these issues have to be tackled," says Arezki.

Robotics anonymous

Interestingly, his confidence to create the mask came from designing a robotic dog with a 3D printer. A slick, black creation called iXeraBot, it's a trusted companion that can walk, dance and kick a football – but not yet bark. "I had fun making it, but it was also a challenge," says Arezki. "I got the idea from Boston Dynamics, who had designed a robot dog for £75K. I wanted to create something similar and simpler, at a much lower price. It was also important to see if I could get people to sponsor me… and people from South Korea sponsored me with some very expensive motors.

'We didn't do this for the plaudits or for the visibility. We just wanted to do something to help people, when they really needed it'

"The dog gave me the confidence to create the mask outside the comfort zone of a large corporation. I wanted to see how many people I could reach if I started from nothing."

Masks and dogs aside, Arezki has a not-inconsequential day job: strategy director for autonomous driving at Thales, which deals in digital, "deep-tech" innovations and new business models. When asked what has been his most challenging project in his 11 years there, he says: "It's always the current one." Today that is RailBot™, an autonomous train system for mainline railways.

WORDS: MEL BRADMAN

"This is very special for me," Arezki says. "It will solve a lot of problems in terms of mobility, people and goods, and it will, of course, be greener. When there's a shortage of drivers or technical problems, you'll still have the trains running." The prototype is due in 2023 and the first trains are expected to run in 2025.

In the middle of all these projects, Arezki is studying for an EMBA at London Business School. "I'd been thinking about doing it for at least 10 years. But now is the right time to look back on my career, fill any gaps and learn more. I want to strike a better balance between technology, business strategy and marketing – and LBS is the right fit. Executive MBAs are designed for people like me, who work 100%. It's every other weekend and exams are during the weekends as well. I couldn't do anything different from this one."

A drive to improve things

Arezki says it's his curiosity and creativity that keeps him moving forward. Resilience is also a huge part of his make-up – something he developed at an early age, growing up in civil-war-torn Algeria in the 1990s. "Every day, when you went to school or to work, you didn't know if you'd come back," he says.

His father is a professor in neurology and his mother a physiotherapist and former captain of the Algerian national basketball team. "They are intellectuals, and every intellectual in Algeria was threatened by terrorists, telling them 'You have to stop working'," says Arezki. "But they were strong and carried on – and protected their three children [Amine, his brother Samir and younger sister Lilia]. We had to go to school and come straight home. I wasn't allowed to go to nightclubs, parties, or play sports in a club… It was hard, but it was the right thing. I lost a lot of friends in Algeria, friends my own age. I've seen terrible, crazy things. Of course, it's traumatic, but step by step it makes you stronger. And you move forward."

After an electronic engineering degree in Algeria, he acquired a master's in robotics and smart systems at the Pierre and Marie Curie University in Paris, then got a scholarship at Rutgers University in New Jersey to do an internship, working on a robotics project for medical applications.

He remembers, "Funnily enough, at work I never saw myself as a developer. There are many good engineers who can do that better than me. I was always trying to see what's new, what's coming, and trying to push. What drives me is improving things."

The mask hasn't gone unrecognised. It's on permanent display in the Smithsonian Museum of American History in Washington, DC; a prestigious science journal ran a feature on it; and it was shortlisted for the ADC awards – the Oscars of craft and innovation. "That really was a big deal," says Arezki. "We were competing with MasterCard, Google, Patagonia… these big, big, big brands.

"But we didn't do this for the plaudits or for the visibility. We just wanted to do something to help people, when they really needed it. That was our driver. We thought, if only one mask was printed and one life saved because of it, then it's enough." □

Following the forest path

Sundar Bharadwaj MBA1998 and **Roy Masamba** explain why they have launched a multi-billion-dollar startup to grow bamboo on a huge scale across Africa

Sundar Bharadwaj is a business leader with three decades of global experience. "I feel I've been preparing for this job for the past 30 years," he tells me over a Zoom call. When he explains what "this job" entails, I see what he means.

He is CEO of TERRAGRN (pronounced "Terra Green"), one of the largest private-sector, nature-based solutions currently tackling climate change. "I've spent years running large organisations across multiple continents," he adds, "which I'd never have survived if not for the confidence I built up at London Business School. It was the experience at LBS that provided me with the formative skills to look at global issues through multicultural lenses. Vigorous debates in a class represented by 40-plus nationalities provided a perfect setting for appreciating multiple perspectives on the same issue and realising that many global issues need local solutions."

Joining Sundar is another LBS alumnus, Roy Masamba, who did a two-week residential advanced management programme from 2004-06. "LBS introduced me to new elements of education, mainly finance, capital markets and strategic leadership," he says. "All of which have been put to use while supporting Sundar in investor pitches, fundraising and long-term planning. I would not have been able to do this without my experience at LBS."

The third member of TERRAGRN's founding team is Krishnakumar Raman ("KK"), "who dreamt of the idea" while enjoying retirement, but was lured back to work to develop the company, which was launched in 2021, after curating it for over 40 months.

The first step will be to secure large swathes of barren land for reforestation across South Africa – up to 200,000 hectares. The land will be transformed into sustainable, biodiversity-compliant forests with millions of bamboo and other trees.

Why bamboo? Because it emits 35% more oxygen than other plants, absorbs 40% more CO_2, and grows to full maturity in four years. New shoots grow to full height in six to 12 months, providing new green cover to mitigate effects of harvest. This, says Sundar, “means you can maintain a thriving forest without deforestation effects.”

The harvested bamboo will be converted to small biomass pellets and shipped to industrial customers around the world in the power-generation and heating sectors to replace coal and wood pellets and reduce carbon emissions, removing millions of tonnes of CO_2 from the atmosphere via the forests and in reduced customer CO_2 emissions.

To grow bamboo at such a large scale is not easy outside of China due to its flowering pattern. TERRAGRN has overcome this challenge with a tissue-culture facility to generate millions of bamboo saplings.

The next step will be to engage 300-plus female entrepreneurs – local South African women who will run the business and become stakeholders. Bamboo lives for 60 to 120 years, so a female entrepreneur can pass on her part of the business to her daughter, and the legacy continues.

The project will also create 30,000-plus jobs for South Africa’s local communities in the forestry sector. “This,” says Sundar, “is when the business starts to create tangible socioeconomic impact. South Africa will see a lift in the economy after such high unemployment levels. Fundamentally, this is the right model.”

A large global bank also believes it’s the right model and has offered to syndicate TERRAGRN’s multi-billion dollar investment needs in the project, making the company one of the largest startups in the world. And South Africa is only the start – Kenya and Ghana will follow, with five or six more countries later.

This is what Sundar and Roy have to say about TERRAGRN – and each other.

‘South Africa is only the start – Kenya and Ghana will follow, with five or six more countries later’

Sundar on Roy

“I first met Roy around 2010, when we were working for Vodafone. He was HR director and he tried to hire me from the UK to work in Kenya. I didn’t take that job, but we formed an excellent relationship. I found out he’d been at LBS six years after I was there, in 1996-98. After that, we bonded. ›

WORDS: MEL BRADMAN PHOTOGRAPH: ROB GREIG, BEN BERGH

"Because TERRAGRN is such a huge, people-intensive business, we needed someone who's a people's champion, who has run a large people setup. Roy's was the first name that sprang to mind. When I contacted him he was wrapping up one of his major engagements in South Africa as chief people officer at the cable TV network MultiChoice. I got to him just when he was thinking, 'What next?' Roy saw the opportunity of TERRAGRN, but also the challenges. He said, 'How do you think we can get the local people involved?' I knew then that I needed Roy on board. A month later he said, 'I'm in.' That was a year ago.

"Since then, the three of us – me, Roy and KK – have been beavering away, building an investor community. Three months ago, things started to turn very, very fast in our direction. The large global bank agreed to bring their own funds and syndicate our entire investment for the South African project. MTN Foundation – part of one of the largest telecommunication companies in Africa – said they would put resources on the ground to support TERRAGRN's efforts. The World Resources Institute – which works with the UN Climate Change and the World Bank – also got behind us."

Magnetic personality

"Ever since I met Roy I've cherished every moment of interaction with him. He's one of these magnetic personalities. Once he gets into a conversation, people want to listen. Because he's worked and studied in so many different countries he has this perfect balance between his 'Africanness', understanding local cultures and thinking global. This impacts really positively on his decision-making.

"Roy is very measured in his style of communication and clarity of thought. He's not an HR person – the type that goes by the rulebook. He's a commercially minded people champion. This might be partly down to LBS thinking. He went there on an advanced management programme through Vodafone, so he was already identified as a rising star.

"He adds value every step of the way. He takes up two primary roles. One is setting up and developing the organisation that's going to house 30,000 employees. He also has to select the 300 women entrepreneurs – a very tough job. He'll have to find a way to upskill them and put organisational structures in place. Roy's a natural salesman, without having to sell. He is absolutely charming. Even in difficult conversations, he's calm, composed, assertive, firm and clear about what he needs to get out of it.

"Roy's other role is Land Acquisition Lead – and he's performing phenomenally on it. That means getting all the land approved or allocated to us, on long lease, from the different custodians, and securing government consent to generate forests. We have to go through so many procedures with the local chiefs, the agriculture, forest and fisheries department, and the biodiversity units in the South African government. Roy is the man on the ground. He's made connections with local chiefs through his own network. He pitched the idea of TERRAGRN to the King of Mpumalanga province and his council last month, and we are now working to finalise a long land-lease agreement with the royal household.

"He's got this British sense of humour, quite cynical. I'll be talking about something serious and he'll make a remark and we all burst out laughing. He can lighten up any tough conversation. He takes the mick out of all of us. I'm very commercially minded and I keep thinking, 'We need to find investors, we need to find customers, we need to do this and that.' Roy, although he understands that, takes a different approach. The three founders, we live in three different countries, and we work well as a team. It's phenomenal.

"We will make money. Absolutely. We'll make a lot of money for the community, a lot for our investors, promoters and founders. It's a $1bn turnover business from year 10. And that's just in South Africa. This is absolutely a money-spinner, but we're doing this by looking after our planet. We're also writing a blueprint. Anyone who wants to take this idea, and do it in their own country, is welcome. We need everyone involved. I wake up every morning so energised, doing something that will make a difference."

Roy on Sundar

"When Sundar first contacted me about TERRAGRN, I'd just left the corporate world, my last group CHRO role, and I was in that space when certain things are meant to happen, you're in the right place at the right time. I'd been looking to do something of my own, something more entrepreneurial. I was immediately captivated by the purpose of this project. It was so elegantly simple. And I knew

Biodiversity breakthrough: TERRAGRN Chief Product Officer Krishnakumar Raman conceived the idea to use fast-growing bamboo to tackle carbon emissions sustainably

the impact it would have on a continent that's close to my heart. I was born in Zimbabwe. I've seen my mother's struggles, my grandmother's struggles, my sister's struggles. So, doing something to help balance that chronic gender imbalance is a huge strand of motivation. The impact, the scale of it, the fact it's going to give generational contribution to the fight against climate change – all these elements came together in my early conversations with Sundar. I was on board. I couldn't resist.

"I did my MBA at Cranfield, and one of the highlights was we beat LBS at rugby! So, when I had the chance to go to LBS, on an executive advanced management programme, I was like, 'Yes, of course – after beating them at rugby I'm going to spend two weeks drinking their Kool-Aid!' But there were so many rewarding elements of my LBS course. It also brought together senior leaders from across Africa, who I got to know deeply."

Global perspective

"Sundar and I first interacted during our Vodafone days. I talked to him about a job opportunity which didn't materialise, but when we found out we'd both been to LBS that sealed our bond. That's what brought us back together, overseas, seven years later.

The global perspective, being able to work across cultures, is something very strong we share. He's from India, I'm from Zimbabwe, and we've both worked in Europe and the UK.

"I'm always wearing my CHRO hat, asking, 'How do we place this huge team we need to bring in?' Having lived and worked across Africa, I know the territory more than most. I know about African talent. Sundar is infectious in his optimism. He exudes it. He's always got a smile and boundless energy. He'll be sending you things at 1am, 2am… He juggles hundreds of balls.

"And whenever he interacts with you, he has the time for you. He's not distracted. His listening skills are fantastic. There's never a negative experience in the way he does things. And of course, he's as smart as hell.

"As CEO, he's always seeing 360 degrees of this project. His ability to project-manage, chaperone things forward, and be seen on the sidelines – to find out what needs to be brought in and when – has been the most helpful."

No hierarchy

"Sundar is very resourceful. His sales background really helps. He's got the tenacity to follow through on connections. We've opened doors with amazing people across the world who fall in love with what we're doing and want to jump on. A lot of that has been down to how he farms his network.

"He has the overall leadership role, but he does it in a way that [says] we're all in this together. There's no hierarchy. His humility is something else; he always gives credit where it's due. We speak every day, myself, Sundar and KK. It's a team of three that gets on like a house on fire. We're like brothers now. If a day goes by and we haven't spoken, it feels weird.

"Sundar and I are both quietly ambitious. There's fire inside us to do bigger, grander things that are unthinkable, but we're going to march on. We share that quality. We wouldn't be involved in this project if we didn't think crazy! But we're trying to act normal. When I go to bed I think, 'What the hell are we trying to do here…?' but it's energising us. We're not stopping." ◻

Follow Terragrn's progress on LinkedIn, Twitter and www.terragrn.com

TERRAGRN: goals and stats

The company's climate-action plans in figures

- Grow 200 million+ trees before 2030
- Remove 4.5 million tonnes of CO_2 per annum
- Reduce 1 million tonnes of CO_2 per annum for industrial customers
- Empower and employ 300+ female entrepreneurs
- Create 30,000+ new jobs in the forestry sector over 8 years
- Share wealth with local stakeholders
- Contribute to 15 of the UN's 17 sustainable development goals
- Protect local biodiversity and enhance soil health
- Achieve near-zero carbon footprint via power, transport and communications
- Support social-infrastructure development within local communities
- Promote gender equality in education and work
- Create a comprehensive watershed scheme for soil and water conservation

ELEONORA ALBASI ON UNSPLASH, ALAMY

A new venture calls

Gil Meron MBA2008 travelled to the other side of the world to head New Zealand's unique agrifoodtech initiative. Why? Because he "believed in the dream"

Tucked away in the city of Palmerston North, on New Zealand's North Island, is an old dairy-processing facility on Dairy Farm Road. Here, a dedicated "herd" of international investors and mentors are cultivating the best agtech and foodtech initiatives New Zealand has to offer. Welcome to Sprout.

Launched in 2015, Sprout started out as an agtech accelerator. Over the past year it changed its business model and has matured into an independent investment company. It now has up to NZ$40 million (about £20.3 million) available for seed-stage capital. So far, it has launched 47 companies that are leaving its footprints (in Maori, 'tapuwae') on the future health of the planet.

CEO Gil Meron (Meirovich) elaborates: "Sprout was one of New Zealand's first accelerator companies. Last year it formed a consortium that won a tender to be a New Zealand government (Callaghan Innovation)-backed tech incubator. That means the government helps with operating expenses and underwrites part of the risk, which in turn enables us to be ecosystem builders. For every dollar we put in, the government gives us $3. That's huge. It allows us to write NZ$1m cheques to promising startups. This is a win-win-win, for the founders, for us and for the government, who invests a lot of money into agricultural research and we help them commercialise it."

Gil credits his time at London Business School for recognising the opportunity Sprout offered – and the fact that sustainability and business can co-exist. "At LBS, I found out that corporate social responsibility exists. Some corporates are forced to do it, others choose to do it. LBS helped me understand that I could choose to do it – and play in a place like this."

From Israel to New Zealand

Gil, an Israeli, uprooted himself and his family from Israel to join Sprout last year. At the time he was working for Finistere Ventures, one of the first professional institutional investors to back agricultural and food technology startups. His boss told him about an opportunity to build an investment vehicle in New Zealand. "He said we had an opportunity to build something bigger, to leverage on previous

WORDS: MEL BRADMAN PHOTOGRAPH: KEVIN BILLS MEDIA successes and track records, and with great international partners. One of our other partners was the Israeli investment platform OurCrowd. So it was this group of Americans, Israelis and corporates buying into the idea of building something big.

"Sprout was a very convenient founder because I joined a business that already existed. It had a budget, so it wasn't a founder that scrapes. I've done that, and it's not for the faint-hearted, especially if you're moving with your family to the other side of the world. Plus, I had the comfort of knowing that the forward-looking Kiwis at Sprout believed in this project long-term."

Everything Sprout does is geared towards the long term. Its approach is anchored by a culture of "going to the trenches" with early-stage companies, which means navigating their journey to make sure their product gets noticed by a global network of investors and partners. "We don't invest in technology," says Gil. "Technology is important because it's the moat around the castle, but we invest in people. We want to invest in entrepreneurs. And we always stay true to our slogan: break new ground."

'We don't invest in technology. Technology is important because it's the moat around the castle, but we invest in people'

Learning to hustle

Gil's early career was in technology – by default. He started out as a computer engineer as a graduate of an elite programme of the Israeli intelligence service. "Back in the '90s," he recalls, "it was practically impossible not to go into the hi-tech industry, especially coming out of this programme."

He joined IBM, first as a student, then full time on "the most exciting project a computer engineer could ask for": working on Microsoft's Xbox 360 gaming console. "It was every engineer's dream. IBM was developing the CPU for PlayStation 3, the CPU for the Wii and the CPU for Xbox 360, behind Chinese walls. It was incredible, but it also helped me realise that tech development wasn't for me. I wasn't passionate enough about it."

So, eight years later, he enrolled at London Business School. "LBS seemed like a great opportunity to restart," he smiles, "to learn about things that are happening in the outside world. It was a good time to do an MBA in a place that was world-class and in a big city.

"I wasn't a very humble guy, but I remember the showcase at the intro to the entrepreneurship course, where every group showed their project. My jaw just dropped. I thought, 'Wow, these are amazing people. Creative ideas, the thought behind the research, the quality of the execution – mind-blowing."

He graduated from LBS with distinction. He remembers, "I got all the interviews I wanted. LBS taught me how to hustle. I had to get out there and compete. I had to sell."

He found a job in London with the Boston Consulting Group – an "incredible" period, but at the time the financial market collapsed. "It was a bloodbath," he recalls. "But I also learnt so much about myself and my capabilities."

At BCG Gil was assigned to carry out an analysis project in the water sector. "Israel is a very dry place," he says. "Less renewable water per capita than Syria or Libya, but it's still able to sustain a modern economy. We looked 30 years into the future with these guys to see what it would be like. My client said, 'Wow, trying to supply water that creates the food and the energy of this planet, that's the thing. That's where we want to be.' I moved to Israel, my client left his job and we started exploring this space with money from UK-based investors. This led to the career I like and am passionate about."

Free ticket

Gil began working with the World Bank on the International Finance Corporation's agritech strategy. Building its investment pipeline gave him a free ticket to speak to any professional investor in the global agrifoodtech investment community. One he spoke to was Arama Kukutai, co-founder of Finistere Ventures, who persuaded him to jump ship and build Finistere's activities in Israel. Becoming CEO of Sprout was a natural progression.

There is no shortage of applicants pitching for a place in Sprout's stable. Last year the company decided to take two cohorts from more than 100 applicants through its accelerator arm. "We take the best cutting-edge companies we think will be coachable and that we'll enjoy working with," says Gil. "It also allows us to experiment. That's an important part of our strategy – to be experimental."

Sprout's mentors drive the chosen startups into pivoting and delivering, possibly changing the taste of their product or their focus or market. "We see them perform, we see them improve," Gil explains. "We see if they're coachable and can convert opportunities into deals. That's the best due diligence one can have on the team."

Sprout also helps the startups overcome one of the biggest challenges: raising follow-on capital. "If you went through the accelerator you are more likely to raise money, either from Sprout or from investors you are exposed to through the programme. Raising money from Sprout has an extra benefit as our investors are follow-on investors – their business is investing in these later rounds."

Sprout also has a partnership arm, which enables corporates to engage with startups. "Corporates and startups are like fire and water," says Gil. "But they need each other. The startups need clients or suppliers and the corporates need to know what new technology is out there. Corporates are slow, startups are immature, so they need to engage. We facilitate that."

A partnership with Maori

Learning and nurturing go hand-in-hand at Sprout. "We're working on forming a partnership with New Zealand's indigenous Maori people," says Gil. "They care greatly about the land. They have a different view – a much longer time horizon – and, as a result, a more sustainable view of life and farming, called 'kaitiakitanga'." (A 'kaitiaki' is a guardian; the concept denotes guardianship of the sky, the sea and the land.)

"It's a great opportunity for us to learn from them," he continues. "We're also trying to start an internship programme for young Maori professionals. We really want to integrate them into who Sprout is."

As for his own integration into the company, Gil concludes: "They took someone from abroad with very little network in New Zealand and not a lot of understanding of what was going on there, though I spent the year of lockdown listening to every possible podcast I could about life and entrepreneurship there. I wanted to work in an industry where I'd feel good about what I do. I just believed in the dream. It seemed right." ◻

Introducing the Institute of Entrepreneurship and Privat

We have lift off: (Left to right) Florin Vasvari, Jane Khedair, Jeff Skinner, Rubina Kalra, Luisa Alemany and Eva Negrutzi

PHOTOGRAPHY: CONOR O'LEARY

Luisa Alemany and **Florin Vasvari** outline how a new London Business School institute will help bridge the gap between founders and investors

London Business School is well known for its research insights into entrepreneurship and financial markets, its teaching of the key instruments available in the private capital sector, and how to build new ventures, scale startups and promote technical innovation. Now, the School is bringing together its accumulated knowledge in entrepreneurship and finance in private markets to create the Institute of Entrepreneurship and Private Capital (IEPC). The new institute was launched in September 2021.

Forged from the union of the Institute of Innovation and Entrepreneurship and Private Equity @LBS, the IEPC aims to further the School's reputation as a global knowledge centre that will support and promote new ideas that drive sustainable economic growth in private markets. The combination of entrepreneurship and private capital highlights the reality that most entrepreneurs obtain funding for their ventures from a large ecosystem of investors in private markets that covers various types of fund, such as seed, venture, growth, buyout and special situations funds.

LBS alumnus and School donor Michael Schad MiFFT2003, Partner and Head of Investment Management at Coller Capital said: "It's great to see that the IEPC has been launched at a time when private markets are rapidly developing, both in size and sophistication. The holistic approach LBS is taking has never been so valuable in my view. I vividly remember that it was challenging to get informed about the industry when I was prepping for my interviews at Coller Capital. Having institutes like the IEPC that help to bridge the knowledge gap with industry through their research will give a better understanding of the various career opportunities that are available to students in private markets. As an LBS alumnus, I am proud to support the efforts of the IEPC."

The support from the LBS alumni community is also evident in the new 'Tech Disrupt & Transform' scholarship, which is offered to MBA students through the generosity of Jason Schretter MBA2005.

Connecting two communities

The IEPC will provide a bridge between the LBS community and the entrepreneurial ecosystem by facilitating new real-world learning opportunities, as well as enhancing the research and business-development experience for all stakeholders. ›

Besides events organised by the School, degree students and executive education participants will benefit from the Incubator, as well as highly experiential courses.

The first in a new TELL Series (Talks on Entrepreneurial Leadership at LBS) kicked off the academic year on 22 September with Joe Foster, co-founder of Reebok.

With regard to the experiential courses, the long-standing 'Entrepreneurship Summer School' continues to support the development of ideas outside the classroom. Two newer courses, 'The Entrepreneurship Lab (TEL)' and 'Innovation to Market' (I2M), offer students the opportunity to work with founders and researchers from top institutions and apply what they learn to real, high-impact ventures.

Another initiative will be internship projects to work side-by-side with top venture capitalist and private equity fund managers based in London. The internships will enable current LBS students to gain real-world experience of private-markets investing and, ultimately, facilitate a career in the sector.

'We are determined to be collaborative to ensure that the impact of our activities reaches those who will benefit the most'

At the same time, the IEPC will maintain an international focus with collaborations that involve practitioners and academics from all over the world. The institute will create a hub for those in the School community interested in participating in private markets and will collaborate externally with London and European startups and private-capital investors and managers.

Businesses in all stages of their life cycle are supported by private-capital investors. Young ventures testing new ideas, companies seeking to scale, entrepreneurs wanting to pivot, leveraged buyouts, family-business transitions and companies refreshing their management all benefit from the support and guidance of the fast-expanding private-capital sector.

Supporting LBS alumni startups

Now in its 12th year, the LBS Incubator continues to grow from strength to strength, allowing alumni to develop their startups through the IEPC's innovative research, networks and skills development and guidance. The Incubator programme will continue to provide £250K worth of support services per team, a series of skills-development talks and workshops, and continuous support throughout the year.

The 'Entrepreneur Mentor in Residence Programme', open to all LBS students, offers guidance from 25 dedicated mentors. Students can also benefit from the newly launched 'Ask an Expert' programme, which offers access to world-class specialist knowledge across a range of subject areas, such as AI and machine learning, to help students launch and grow their ventures.

We are all inspired by the stories of successful entrepreneurs, and in particular

The serial entrepreneur

Rachel Bell, Entrepreneur Mentor in Residence, President of the E-100 Club, investor, mentor and founder of business growth consultancy Brand Spanking

"You get to a stage in your professional life when you've achieved most of what you wanted to do, and you have time to give something back. Entering into a relationship with LBS has been fascinating. I don't have an MBA, but I've started and sold a number of businesses, so I bring practical experience. I know how to make deals happen, how to get businesses moving and how to get teams to new levels to expand and grow. Meeting students at the start of their entrepreneurship journey is super-enjoyable: I get them to think about what their business edge might be, the pricing, how it's going to run. We walk through potential flaws: have you got all the roles you need? What will the customer be doing? What behaviour do you need them to adopt in order to switch to your product? I give advice about share ownership, where the long-term value is, who needs to be kept on the inside of the tent. Like all the investors in the E-100, I love the raw, palpable excitement around getting a business going – the energy and momentum you need at the start, that fearless feeling of conquering the world. The Enterprise 100 is fantastic for angel investors, because what ends up in the room is screened and high-calibre. We catch up monthly about different facets of investment. For anyone who's a CEO or has exited a business, it's a great place to talk. The angel investment fund comes with risk – you're deploying your own sense and knowledge, putting your own bets on the people you want to back. It's super-rewarding and you're giving people that chance you once had yourself to get their business out of the blocks."

PHOTOGRAPHY: CONOR O'LEARY

Entrepreneurial mindset:
Luisa Alemany and Florin Vasvari say the IEPC will bring together the ideas that change the world with the capital to support their financing

by businesses that make a difference to the world by increasing employment, diversity and wellbeing, and combating climate change. LBS has been very influential in the creation and financing of successful new businesses that have benefited from the spark of early-stage financing that is unique to the School. More than that, it is about the entrepreneurial mindset that can be applied to any role or organisation. Ventures that have been devised and driven by LBS alumni, such as Ocean Bottle, Treeapp, Junee and Wype, are distinguished by their commitment to integrating social missions into their businesses.

The IEPC is unique among business schools. We are determined to be open and collaborative to ensure that the impact of our activities reaches those who will benefit the most. An example of this commitment is Newton Venture Program, a forerunner to and committed partner of the IEPC. The initiative was launched in October 2020 as a joint venture between LBS and top London-based venture capital fund LocalGlobe. Silicon Valley Bank also joined in June 2021 as a founding partner. The programme will deliver diversity and training to the next generation of VC investors and entrepreneurs. Next spring, a six-month programme will welcome the first cohort to train those who want to become the future leaders in backing startups and scale-ups.

By bridging the gap between those at the frontier of discovery and those who know how to ignite, run and obtain financing for new ventures, the IEPC will be in the vanguard of generating the knowledge that will enable founders and investors to tackle global challenges. □

Luisa Alemany is Associate Professor of Management Practice in Strategy and Entrepreneurship; Academic Director, Institute of Entrepreneurship and Private Capital.
Florin Vasvari is Professor of Accounting; Chair, Accounting Faculty; Academic Director, Institute of Entrepreneurship and Private Capital.

Thinking outside the lunchbox

Caroline Williams MBA2021, co-founder and CEO, Junee

"I'm American and I moved to London for LBS. To come here and experience the entrepreneurship ecosystem has been a real treat. Being exposed to actual entrepreneurs demystified them. They weren't all eccentric characters like Elon Musk – they were people who were passionate about an idea. The tipping point for me came six months into my programme. I'd been thinking of Junee as a side project, but Covid brought a lot of self-reflection on what I wanted out of my life and my career. I realised how exciting it was to be working on an idea I was passionate about – what if, instead of single-use, throwaway lunchboxes, we could provide a sustainable alternative? I became more and more confident. Joining forces with my co-founder Mary Liu, also an LBS MBA2021, made it more real and motivating. In our second year we explored the idea through various LBS programmes like Launchpad. We also joined the Alpha Accelerator, outside LBS, which immersed us further in London's startup ecosystem and helped us transition from students to full-time founders. Thanks to endless pitch practice through these programmes and connectors we met along the way, we have just closed our pre-seed financing round of £250k. Entrepreneurship can be intimidating – you're graduating with a depleted bank account and loans – so the idea of leaping into something that is statistically likely to fail is daunting. I'd love to see a lot more student entrepreneurs come out of LBS, and support for them in terms of getting funding will go a long way. Anything that can help bridge the gap between entrepreneurship and access to funds is a great development."

When founders meet funders

Financing an initiative to help organisations achieve their sustainability goals

London Business School alumnus Fabian Sinn MAM2021 describes his data and machine-learning company Tanso as "purpose-driven". That purpose? Leveraging a data-led team of experts to build software that supports environmental sustainability reporting for industrial manufacturers.

The early-stage startup aims to remove the barriers that hamper corporations from achieving climate neutrality by helping them measure, understand and communicate their ESG performance, and set goals based on the data.

The founding team, who made their plans a reality in early 2021, chose to focus on industrial manufacturing as the sector is both currently emissions-heavy and underserved by many digital services.

With $1.9 million of pre-seed funding secured, the Munich-based company is now aiming to get its software up and running in time to meet an anticipated rise in demand, as new sustainability regulations begin to take effect.

Reflecting on its decision to invest, Robin Godenrath, Founding Partner and Managing Director of Picus Capital, highlighted Tanso's positive impact, saying, "We believe every one of our investments should have a positive contribution to society, and Tanso does just that."

Alexander Kiltz, Principal at UVC Partners, commented: "We are impressed by the founders and their vision to positively contribute to climate action with technology, and we are excited and honoured to partner with the team and to lead their pre-seed financing round. We look forward to supporting Tanso to become the global category leader in sustainability accounting for the industrial manufacturing sector."

LBS Assistant Professor of Accounting Dr. Marcel Olbert is currently advising the Tanso team on its strategy and the regulatory environment; in particular, drawing on the latest research concerning sustainability accounting and its impact on financial decisions.

Who's who at the new institute

Meet the team behind the School's aim to create value for both entrepreneurs and their funding partners in private capital

Luisa Alemany

Associate Professor of Management Practice in Strategy and Entrepreneurship; Academic Director, Institute of Entrepreneurship and Private Capital

I consider myself an entrepreneur. I am in academia, but looking for the resources and starting new initiatives that hopefully will have an impact. The opportunity of bringing the knowledge and energy of LBS to the entrepreneurial and private equity community are just enormous. Exciting to see our students and alumni applying an entrepreneurial mindset to all their future endeavours, both in their career and to their lives.

Rubina Kalra

Senior Programme and Communications Manager, Institute of Entrepreneurship and Private Capital

As a result of this merger, we're able to further expand our range of opportunities and resources for LBS students and alumni to get involved with. I'm excited for what's to come and I look forward to building relationships with key players in the entrepreneurship and private capital ecosystem.

Jane Khedair

Director, Institute of Entrepreneurship and Private Capital

I'm passionate about entrepreneurship. There you have it – short and sweet – although only those who know me well would describe me in the same way! I'm so excited for our new and enlarged institute. It's a great opportunity to extend our reach beyond the startup world to tomorrow's unicorns.

Eva Negrutzi

Senior Programme and Communications Manager, Institute of Entrepreneurship and Private Capital

Investors and entrepreneurs are often seen as sitting at the opposite sides of the table. Our aim with this institute is to create a bridge between them and help them both in creating value for each other through knowledge-sharing, research, inspiration and networking events. I enjoy sharing the inspirational stories of our students and alumni. It's important to motivate people and light the flame in others. I always think of my mum, who started out by importing goods from Turkey and Hungary to Romania, slowly building up a market stall where we helped as kids and then a small shop. She has retired, but her passion never stopped, and she is 72. This is the same passion I see in our entrepreneurship community. We not only celebrate successes, but help the founders learn from each other and promote an entrepreneurial mindset. Now we'll do the same for the investors, who are increasingly keen to engage with the LBS community. People have different journeys, ups and downs, but there's a willingness to share both good and bad experiences so that new entrepreneurs can learn from experienced ones. By integrating private equity and venture capital and broadening our offerings, we will be able to contribute to the full lifecycle of an entrepreneur's journey.

Julian Franks

Professor of Finance; Alexander M. Knaster Chair; Fellow of the British Academy; Academic Director, Institute of Entrepreneurship and Private Capital

I'm delighted to be part of the new centre, which brings together two research and teaching initiatives that have already played such a vital part in the School's programmes.

Jeff Skinner

Executive Director, Institute of Entrepreneurship and Private Capital

I love anything that prompts people to create new ventures. In a previous life, I co-founded dozens of them myself; nowadays I live vicariously through the successes of our students, doing anything I can to encourage and equip them to build their first business from scratch. It's all about creating programmes that I wish had been around when I was a student here. Nowadays, entrepreneurs are as much in the market for capital as customers – maybe because the best ideas are imitated far faster than before. The IEPC expands our remit, allowing us to engage with investor communities and thus give our students even more of a head start.

Florin Vasvari

Professor of Accounting; Chair, Accounting Faculty; Academic Director, Institute of Entrepreneurship and Private Capital

I'm passionate about investing and enjoy interacting with our stakeholders. And I'm excited about helping to build a platform that brings together students, academics and the investment community in the private market, which has gone under the radar screen for too long. Although private-capital funds are the proverbial "special sauce" that provides critical support for the formation, development and expansion of entrepreneurial businesses, most people know very little about them. Our main aim is to lift the veil over these funds and their echo system.

A cleaner way to cleanse

LBS alumni Giorgia Granata MBA2018 and Eli Khrapko MBA2018 founded Wype as an alternative to the hundreds of millions of wet wipes that end up in the oceans every year

"Our gel is 99% natural, biodegradable and plastic-free, which means it reduces the huge environmental problems we face from people flushing wet wipes," says Granata, former Head of Product Development at Versace Jeans Apparel. Khrapko, a former officer with the Royal New Zealand Air Force and an aeronautical engineering graduate of the University of NSW, explains that around 80% of marine litter starts on land and rivers and wet-wipe "reefs" help transport non-biodegradable debris out to sea. Less than a year into their venture, with their award-winning company already turning over £230,000, the founders are branching out internationally, growing their community of supporters and customers, prototyping designs, expanding their product line and engaging in a crowdfunding campaign on Indiegogo. "Eli's a glass-half-full kind of person, while I am more cautious in my approach," says Granata. She admits that, before LBS, she was daunted by the nuts and bolts of the business world. "I'd never have dreamed that I would be able to talk about business affairs with the confidence that I have today," she says. They are thankful to Jane Khedair, Director of the Institute of Entrepreneurship and Private Capital, for her advice and support. In addition, it was invaluable being part of a network of frontrunners; business entrepreneurs who had gone before them and were making a success of their ventures. "Seeing other successful entrepreneurs provides a boost to your confidence," says Khrapko.

> **'I'd never have dreamed that I would be able to talk about business affairs with the confidence that I have today'**

London Business School

Institute of Entrepreneurship and Private Capital

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From buzzwords to building the future

Ioannis Ioannou outlines what leaders need to do to make their organisations part of the solution to the environmental and social challenges we collectively face

WORDS: EMMA BROOMFIELD PHOTOGRAPH: MARY BETH KOETH

Sustainability has long been a buzzword used by the most forward-thinking companies, but it has never been more vital for all organisations to translate the word into action.

We live in a world where everyone has a voice. Customers, shareholders and society as a whole demand a higher degree of accountability and transparency. And business leaders are beginning to listen: a growing number are boldly adopting sustainability as their organisations' core corporate purpose.

It's a response that cannot come soon enough, believes Dr Ioannis Ioannou, Associate Professor of Strategy and Entrepreneurship at London Business School, whose research focuses on sustainability and corporate social responsibility (CSR).

Through his work he seeks to understand whether, how and the extent to which the modern business organisation contributes towards building a sustainable future. "Sustainability is the challenge of our time, it is the task of our generation," says Dr Ioannou. "We need to leave the planet in better shape than we found it. And that challenge extends to pretty much every aspect of our life right now – our lifestyles, our jobs, our economy."

Sustainability leadership

He continues: "There is really big doubt about the ability of the capitalist system to deliver value for everybody. We have created a lot of financial value, but at a huge cost to the environment, the planet and society. This, in turn, creates a lot of pressure for companies to adopt a new model of corporate leadership which talks to these issues and meets stakeholder demands, all while increasing competitive advantage."

Addressing such issues is no mean feat, which is why Dr Ioannou created the LBS Sustainability Leadership and Corporate Responsibility programme. It is aimed at senior leaders who are tasked with or seeking to develop sustainable practices within their organisation. Over six weeks ›

of learning, participants are provided with the tools to reconceptualise critical global challenges as growth opportunities, while also achieving a positive social impact.

That begins with understanding what sustainability is and why it is relevant to all businesses. Simply put, sustainability means integrating environmental and social issues into the core of the company's business model and strategy. This includes measures to address everything from growing income inequality to the devastation of the natural environment and the massive loss of biodiversity. But why do businesses need to prove that they are part of the solution, not the problem?

"Sustainability is the biggest disruption that businesses have faced in the last 50 years," Dr Ioannou replies. "And that is because businesses lack the experience, knowledge and expertise to tackle the issues in what we call the broader environmental and social domains, simply because they haven't done so in the past. What businesses need to realise is that those who don't make the necessary investment to adapt are likely to perish through disruption."

There is, of course, no overnight fix for companies wanting to place sustainability at the centre of their business model. Rather, Dr Ioannou warns of the "multi-dimensional pressures" they face from governments, regulators and civil society.

Meeting stakeholder expectations

The savviest business leaders will also need to be in tune with their stakeholders. As the expectations on corporate responsibility increase, professional communications and good intentions are no longer enough. Stakeholders are looking for transparency, action and accountability. That begins with the labour market and a predominantly millennial workforce who want the values of the companies they work for to align with their personal values. "Ignore sustainability in reference to the labour market and your competitors are going to have preferential access to human capital," Dr Ioannou says.

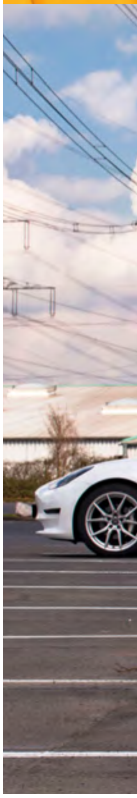
Similarly, many investors monitor the social performance of companies; something that's become easier as regulations increase and organisations face more pressure to reveal details of everything from their supply-chain standards to emissions produced. Greater transparency also helps expose greenwashing (trying to appear more environmentally and socially responsible than the business really is).

And let's not forget consumers, who are more informed than ever before. Brand loyalty is no longer guaranteed. Ignore your economic, environmental and social footprints and you run the risk of losing their custom altogether. The good news is that this doesn't have to be the case, says Dr Ioannou. But, as a senior leader, you need to be willing to adapt your model to respond to ever-evolving factors.

"In terms of sustainability, the conditions are massively changing, so you require a massive rethinking of your business model," he says. "That begins with accepting that what might have worked in the past won't work now. Think of companies like Kodak or Blockbuster – once you crack the code, you can become a successful business, but if the conditions change, you must, too."

Building a strategy to transition to responsible business should be attainable for any company – but, to stand out from the crowd and transform your competitive advantage, Dr Ioannou suggests thinking like a disruptor. Many companies who are embracing sustainability will adopt emerging common practices by following regulations and mitigating risks, but they can only ever expect to be "middle of the pack" in so doing.

'What businesses need to realise is that those who don't make the necessary investment to adapt are likely to perish through disruption'



Dinosaur or disruptor? The failure of companies such as Kodak and Blockbuster to evolve led to their downfall, while innovators such as Tesla disrupt the status quo to capitalise on change

JAKOB OWENS ON UNSPLASH, ALAMY

In contrast, the most visionary of companies and leaders "are the ones that try to reinvent themselves, their business model and their strategy in a way that actually takes one of these opportunities and scales that really quickly," says Dr Ioannou. "Look at Tesla, for example, and what they did in electric vehicles. Because now, with every major city around the world starting to ban fossil-fuel cars, it's evident that there's a huge market opportunity. An innovative approach to sustainable business can shake up even the most traditional of industries."

Four principles to embed sustainability

To begin that process, Dr Ioannou outlines four key principles that business leaders must master in order to embed a culture of sustainability into their organisation's DNA; thus translating purpose into practice and, ultimately, results.

First, when a company is genuinely committed to a purpose (in this case, sustainability), it is reflected in their governance structure. "The top of an organisation sets the tone, signals a credible pledge to purpose as well as monitoring and advising," says Dr Ioannou. "And leaders who set ambitious goals are more likely to inspire, enable and empower their people to find innovative solutions."

Next, Dr Ioannou's research shows that companies driven by a "high-sustainability" purpose are more focused on understanding

the needs of, and creating purposeful engagements with, stakeholders. "We're way beyond the world in which you deal with employees only when they strike, or with customers only when they boycott," he acknowledges. "But you need to look at your stakeholder-management process essentially as an investment that will create relationships. These relationships are the intangible assets that you can then use in your value-creation model. Simply put, more satisfied employees and customers can really enhance the quality and effectiveness of your innovation process."

The third principle focuses on long-term decision-making horizons, and how responsible leaders play a critical role in communicating the orientation of their organisation beyond the short term. "Rather than only looking at today as you devise a strategy, you need to convey that change will take time and effort and investment," advises Dr Ioannou. "Communicating that will afford you external legitimacy and the patience of your stakeholders."

Finally, he notes that high-sustainability companies are more likely to measure and report on environmental and social metrics, in addition to financial results.

Being transparent and ultimately accountable is essential for leaders in determining how well they are executing their purpose. "Provide your investors with accurate, trustworthy data, financial and non-financial, so they get a full picture of how you run your business," he advises. "It's no longer just about what you do within the walls of your own business. Showing you meet human rights or environmental standards ripples right through your supply chain. In essence, being accountable helps you bring more people on board – and ultimately impact more lives."

While all four principles are equally important, they are also intrinsically linked, says Dr Ioannou.

And of course, embedding them into the organisational DNA does not come without costs. "But is it really a cost or is it an investment?" he asks. "My argument is that, if you actually get sustainability right, then it does lead to better, more thriving businesses. There are always trade-offs in management, but the best companies use them to distinguish themselves in the sustainability space."

Evaluating your trajectory

Such change also doesn't happen overnight. "It's always important to understand the stage a company is at today, but even more important to be able to evaluate the trajectory. Are you moving in the right direction, with the right speed and magnitude of change?" asks Dr Ioannou.

By having the tools, frameworks and insights to build a roadmap to achieve goals and guide efforts towards sustainability leadership, organisations can be future-proofed and also gain a long-term competitive advantage. More significantly, doing so enables business to become a force for change and add value for society as a whole.

And that is something to be really positive about, concludes Dr Ioannou. "Together, we can have a profound impact on the way the world does business and the way business impacts the world. But it has to be a collaborative effort. And it's one that cannot wait." □

Ioannis Ioannou is Associate Professor of Strategy and Entrepreneurship at London Business School

How to harness the power of marketing for a better world

Rajesh Chandy says marketing can teach us much about human behaviour – and, if we listen, we can use business to help transform the lives of millions

Could better marketing really be the key to a better, more sustainable world? For Rajesh Chandy, Professor of Marketing, Tony and Maureen Wheeler Chair in Entrepreneurship and Academic Director of the Wheeler Institute for Business and Development, the answer is a resounding yes. "When we begin to consider the possibilities of marketing's impact beyond simply improving a firm's financial performance, we see how it has the power to be a real driving force for change," he says.

This belief is the inspiration for Better Marketing for a Better World (BMBW), an initiative Professor Chandy co-founded with Professors Christine Moorman, John Roberts and Gita Johar.

Serendipity and setbacks

Growing up in India in the 1980s, the young Rajesh Chandy felt he had few options. "It was a different India from the India of today. The expectation for a person like me was that you would either become an engineer or a doctor."

He studied engineering, but never felt completely sure of his choice. "I wasn't a bad engineer, but it didn't come naturally. I could do it if I worked hard, but it never gripped me. I never had that intense interest." He knew if he was to succeed he would have to compete for a scholarship at a Western university. "I was studying for the GRE [the Graduate Record Examinations; a standardised test that is an admissions requirement for many graduate schools], but at the same time I was learning about social movements and becoming involved in student politics. These things gave me a glimpse of what was possible." He also began studying for the GMAT (Graduate Management Admission Test) to do an MBA programme, despite believing he would ultimately have to remain in engineering, where most scholarships were offered.

His life might have been very different if his exam board had not refused to share the results of the GRE exam because the answers had been leaked. "We'd all already taken the exam, so they told us we could either resit or get our money back. By then, I'd already had the results of the GMAT and knew I'd done quite well. So, off to business school I went."

After winning a scholarship to a graduate school in the US, he left home when he was 20. "It was the most fantastic adventure. It was my first time on an aeroplane." Was it a culture shock? "One thing that surprised me was how hard it was to send a telegram. We had a phone at my grandparents' home, but the elephants were always knocking the telephone poles down, so my family made me promise I'd send a telegram when I arrived. Of course, when I got to America, people only sent them for birthdays or other special occasions. Nobody knew how I could send one home, so I wrote to them by letter."

Studying business gripped him in a way that engineering never had. "Being able to think in such broad terms really excited me. I just love how enigmatic we are as humans; how mysterious our behaviour is. Business is a great way to explore that." ›

WORDS: ROSIE PARRY PHOTOGRAPH: ROB GREIG

Taking inspiration from emerging markets

Over a decade later, it was a similar stroke of fate that introduced him to Tony and Maureen Wheeler. He had been promised a chair at London Business School and the first one that became available was the chair endowed by Tony and Maureen Wheeler, founders of the Lonely Planet guidebook company, with a focus on entrepreneurship and emerging markets. "Preparing for my inaugural lecture forced me to start looking at the world through a different lens, which is where things got really interesting."

He had been working with large organisations in Western countries, but threw himself into his new field. "If you ask someone which country they think is home to the most entrepreneurs, they might say the US or somewhere else in the West. But look at what that word really means. An entrepreneur is someone who starts their own company, who takes on risks, who doesn't have a boss. It's emerging markets that produce the highest numbers of these self-starters. The US actually has one of the lowest rates of self-employment in the world, just 6.5%. In the UK it's about 11%. If you want to see high levels of entrepreneurship, look at emerging markets. Over 90% of people in South Sudan are self-employed. In India it's 79%."

For Professor Chandy, the numbers highlight the importance of thinking about marketing as a force for change. "We're always asking ourselves how businesses can do good. By paying appropriate taxes? By giving money to charity or creating a foundation? Really, the most beneficial contribution any business can make is by creating employment or by offering products and services that improve lives. Given its focus on growth, marketing can make a huge difference on both these fronts. Of course, the difference you can make in emerging markets, where people's personal and professional futures are inextricably linked, is that much bigger. The profound impact of business and entrepreneur-led growth is palpable in places like India today compared to the India in which I grew up."

These entrepreneurs highlight an important distinction. "Too often when we talk about marketing, we're thinking about people who have 'marketing' in their job title. But much of what these entrepreneurs are doing is actually marketing. Just look at the Brexit bus. No matter what you think of the message, there's no denying that that's successful, impactful marketing."

Chandy and Professor Moorman joined forces with Columbia University's Professor Gita Johar and University of New South Wales' Professor John Roberts, and put out a call for submissions. The response was again staggering. "It was the biggest response the journal had ever had. In a way it was quite overwhelming. Each paper can take years of an academic's life and we knew we could only accept a tiny percentage of submissions."

The BMBW platform now serves to "build community and support the development and dissemination of knowledge on how marketing can improve lives, sustain livelihoods, strengthen societies and benefit the world at large." It runs events, forums and training sessions for academics and marketing professionals of all kinds. Professor Chandy credits the support of the Wheeler Institute for making BMBW possible. "Without the infrastructure, people and skills the Wheeler Institute was able to offer us, we would never have been able to get this platform off the ground."

'The most beneficial contribution any business can make is by creating employment or by offering products and services that improve lives … marketing can make a huge difference on both these fronts'

Can better marketing make for a better world?

The BMBW initiative was launched in 2021 via a special issue of the *Journal of Marketing*, for which Professor Chandy collaborated with Professor Christine Moorman of Duke University's Fuqua School of Business. The pair had, with Professor Jeff Inman of the University of Pittsburgh, co-chaired an international conference on the same topic in 2017. "It was phenomenal," he explains, "it really felt like the event satisfied an enormous hunger in the field."

When Professor Moorman subsequently put herself forward to be Editor in Chief of the *Journal of Marketing*, part of her pitch was to commission a special issue of the journal, investigating whether, when, and how marketing contributes to a better world. Professor

The dark side of marketing

BMBW also tackles what he refers to as "the darker side of marketing". "As academics, I believe we have a responsibility to not just promote positive change, but actively interrogate bad practices. As authors, we can do this by studying the impact of harmful marketing. As editors, we need to be publishing and prioritising work that properly investigates the damage bad marketing can do."

ILLUSTRATION: PATRICK GEORGE

Now hear this: A central aim of the BMBW initiative is to provide a platform for academics to speak out

One of the special issue pieces examined the impact of plain cigarette packaging on people's smoking habits, for example. However, Professor Chandy believes there is still more work to be done. "There's a long way to go. But one of the most motivating things about being an editor or having a platform like this is being able to legitimise these conversations and encourage other academics to speak out."

He also believes we need to rethink what business really means. "For change to be possible, we must change not just how we look at marketing, but business. What is the purpose of a business? Why should it exist? These are the questions we need to be asking."

Addressing these fundamental questions includes assessing business school curricula, too. "Business schools have a very important role to play. Many organisations are solely focused on profit maximisation, and far too many business schools have absorbed that objective. But that can't be all we teach."

And business students today are interested in much more than learning. "Increasingly, organisations won't be able to attract top-tier talent if they don't offer some sense of purpose beyond the day-to-day role. Graduates today aren't just looking for a job, they want to feel they're making a wider contribution."

What caused this dramatic shift? For Professor Chandy, the answer lies in expansive economic struggles. "There is a huge sense of dissatisfaction among many graduates and young professionals. The economy is clearly not working for everyone. Inequalities are accelerating. Something is not right."

These observations have prompted him to help launch two new elective courses at London Business School. 'Digital for Impact', which he co-teaches with Professor Costas Markides, is an experiential learning course in which teams of students work as consultants to entrepreneurs in Africa. 'Innovating for Impact', which he co-teaches with Dr Nick Hughes (an LBS alumnus and founder of the M-PESA mobile money service and the M-KOPA energy service), applies insights from recent research and practice to examine how innovators can improve economic, social and environmental outcomes.

A more collaborative future

Despite the Covid-19 pandemic making in-person collaboration almost impossible for much of the last year and a half, Professor Chandy has continued running events through the Wheeler Institute. If anything, he believes the move to online working has benefited many of their endeavours. "The best work happens when we can bring people from distant contexts together. Western business leaders meeting with villagers in developing countries, for example."

Far from making these unlikely parings harder to form, he believes our reliance on platforms such as Zoom and Teams has helped remove many distractions. "Before we were using Zoom, we'd have well-meaning business executives turning up in rural areas in SUVs with their whole entourage. It's hardly the most natural way of engaging with people. Moving online was a great leveller in that regard. Suddenly it's just two people on a screen."

Does he believe those changes are here to stay? "I'm very optimistic about the future."

Professor Chand is also still teaching and supervising PhD students. But while he enjoys sharing his passion for better marketing with them, he doesn't encourage students to simply follow in his footsteps – a lesson he learned the hard way. "My PhD supervisor, Gerry Tellis at the University of Southern California, is a famous academic. I was completely starstruck but it was disastrous. I tried to fiddle around the edges, just building on his work, and ended up spending two years going nowhere."

But this early setback taught him the importance of finding a niche. "I say to my students now, you have to try and do something original. If you want to do what I'm doing, you should have started 10 years ago. Find a new story, one you really want to tell. If you can do that, you'll care enough to handle the setbacks."

What excites him now? "So many central assumptions about businesses are being questioned. Not just by academics, but by society in general. What is the point of a business? Who should businesses be accountable to? This is a really exciting period of fermentation – so many ideas are bubbling away."

It's the fact that developments in business can bring about wider change that continues to motivate him. "The issues that are important to businesses right now, like tackling climate change, could transform the lives of millions. Who wouldn't want to be involved in that?" ◻

Rajesh Chandy is Professor of Marketing; Tony and Maureen Wheeler Chair in Entrepreneurship; Academic Director, Wheeler Institute for Business and Development at London Business School

Lessons for a low-carbon life

Two years ago **Tom Gosling** resolved to try to reduce his family's carbon footprint by half in 10 years. Here he shares what he and his family have learned about fighting climate change through individual behaviour

Two years ago I posted an article entitled 'A Middle Class Approach to Decarbonisation', outlining our commitment to reduce our family's carbon footprint by half in ten years. It started me off on a personal exploration that has brought about some significant lifestyle changes – and taught me something of the complexities of the wicked problem that is climate change.

Although it seems hard to give attention to anything that isn't COVID-19 at this time, climate change will still be with us when we're through all this. While some aspects of the lockdown-enforced behaviour change may endure and be helpful to the climate (all those flights to meetings suddenly seem less essential), governments' desperation to get their economies moving again may act in the opposite direction. The timing of COP26 is therefore helpful, reminding us of the bigger task ahead.

I set out eight steps we intended to follow to reduce our carbon footprint. Here's how we've got on in the two years since making the commitment.

Calculating our current footprint

This was more difficult to do than I had expected. It required a lot of work piecing together insights from different calculators in order to get a fix on it. Although it was extremely enlightening, I'm pessimistic about how many people will go through the pain of doing this. On the flip side, perhaps it isn't necessary – the top five steps to reduce footprint are likely to be reasonably common across the population. Noting the general success of the public information campaign relating to COVID-19, you could envisage a simple message relating to carbon-footprint reduction:

- Fly less
- Eat less red meat and dairy
- Insulate your home and turn down your thermostat
- Buy experiences, not things
- Make your next car electric.

The vested interests that would line up against some of these messages are obvious just from writing them down. But the current messages on climate are deeply confusing, including some that are at best second order and at worst counterproductive (for example, paper versus plastic bags for shopping). Agreeing on a simple set of first-order messages to promote change could be better than trying to develop ever more sophisticated footprint calculators.

Domestic heat and power

Here I feel we've had something of a success. I learned a lot about the complexities of domestic energy transition; in particular the fact that going electric cannot be an economy-wide answer, given the unmanageable peak energy demand that this would place on the grid on cold winter days. This issue also introduced me to the beauty of hybrid solutions during the energy transition.

We now have a scoped plan for installing an air-source heat pump to provide our heating for most of the year. We'll retain our existing gas boiler to provide hot water and also central heating on those particularly cold days when the heat pump is inefficient. This approach will cut our home energy footprint by 80% (based on my perhaps optimistic assessment that our electricity is carbon neutral because of our green energy provider and solar panels). At the same time, the solution could, in principle, scale up across the population, given the ability to switch to gas at times of peak electricity demand (this meets one of our core principles for any solution we adopt).

My main observation on this was how much of the running I had to make myself to get to this hybrid solution. Providers tend to want you to use the heat pump for heating and hot water, and to rip out your existing hot water system and boiler. The government's Renewable Heat Incentive encourages this outcome, despite the fact that it is unsustainable at scale (because of the implied peak electricity demand in winter). On the one hand this demonstrates the power of government incentives; on the other, it shows how important it is to get them right.

But even now it's not straightforward. We're keeping the gas boiler because our 1930s home isn't ideally suited to using an air-source heat pump for the coldest days of the year. And a heat pump might not adequately cope with the (probably excessive) hot water use of a house with three teenagers. Retrofitting underfloor heating is too big a job to take on, so we'll need to go to the expense of upsizing our radiators to give enough heat output from water at 45-50 degrees, as opposed to 60-65 degrees.

As a result, we need to house both a gas boiler and the internal workings of the heat pump (which take up nearly two boilers' worth of space). In addition, we need a large heat-exchanger unit outside the house – but we're not allowed to have this within a metre of our neighbours' property. So, either we'll need to have a large and unsightly unit at the back of our house visible from the garden, or we'll need to get our neighbour's agreement to have it down the side of the house and run the risks when we sell. This leads to the question: is it worth it? We're still undecided, but our experience shows how formidable the challenge will be of reformatting home heating across the country. ›

'My main observation was how much of the running I had to make myself to get to a hybrid solution'

PHOTOGRAPH: ROB PERCY

Travel

Studying our footprint has impressed on us the need to ration our air travel, and we've implemented our rolling average budget of 1 tonne per year per person in our household. In effect, this means medium to long-haul travel at most once every three years. Current events have helped with this –for 2020, our air-travel footprint was zero! I also had some success at work in avoiding unnecessary air travel through challenging clients about whether remote solutions for my attendance could be sufficient. The COVID-19 experience will certainly accelerate this. I've now attended countless board meetings by video, and we've learned how to run conferences remotely, which can work surprisingly well.

It was instructive to investigate the carbonomics of electric cars. In my view, the calculus comes out firmly in their favour, but in general only for new cars rather than replacing existing stock. In part this is due to the embedded carbon cost of the new car, but it's also because the car that we sell won't be scrapped but will add, on average, 0.75 cars to the total stock, resulting in several thousand extra road miles.

Nonetheless, replacing even a serviceable petrol car with electric is probably broadly neutral from a carbon perspective and has a positive signalling effect – it encourages broader market and infrastructure change. Therefore, rather than waiting until we naturally next replace our cars (probably around eight to 10 years' time), we're planning to switch to electric for our second car (I know) now my daughter has passed her driving test. We can afford it, and it can help support the market for electric vehicles.

Diet and consumption

The big eye-opener for me in this process has been the impact of diet. Had I known this at the outset, I would have highlighted it as a step in its own right, as it is the closest thing you get to a free lunch in the area of climate change. Eating less red meat, and more vegan and vegetarian food (as well as wasting less) has significant and almost entirely beneficial impacts and no negative feedback loops. We have taken big steps towards this, although I have to confess that lockdown has set us back a bit.

With dinner time providing one of the main things to look forward to, and with children's spirits to lift, our meat consumption has drifted up again. But it remains lower than before COVID and is reducing again as some semblance of normality returns. My eldest daughter becoming vegetarian has added positively to our incentives.

Beyond diet, the carbon cost of broader consumption, which drives much of the UK's exported carbon footprint, is also salutary. With consumption choices having an impact factor of up to 10x on carbon emissions, this broader dimension of our footprint cannot be ignored. The COVID-19 lockdown created (for the more fortunate of us) a unique experiment in doing without things we have come to consider essential. As we come out of this phase, we surely have an opportunity to assess which of these expenditures we wish to reinstate. The time when we are doing without them is the moment to reflect on the extent to which they are essential, enhance our fulfilment and life satisfaction, and support us in living our life in line with our most deeply held values and purpose. Wellbeing and climate considerations are both likely to point to more expenditure on experiences and time, and less on material possessions.

Offsetting

Offsetting remains a snake pit. Assessing the extent to which offsets are additional (in other words, would not have happened anyway), effective and immune from rebound effects (whereby efficiency actually leads to greater consumption) is incredibly hard.

We do still offset but, to address the potential limitations of offsetting, we choose to offset 4x our footprint through different approaches:

- Preservation and planting of trees through the Woodland Trust
- Purchase and cancellation of EU Emissions Trading Credits
- Support for indigenous Amazon communities to resist deforestation
- Projects for clean cookers in the developing world.

By throwing enough at the wall, we're hoping some sticks. This allows for 75% of the offset's impact to be lost through lack of additionality, inefficiency and rebound effects. It results in an effective carbon price of £40-£50 per tonne, which seems more realistic than the absurdly low c. £10 retail value of offsets. But proving additionality remains a concern. Investigating this more is on my to-do list. So, offsetting seems to me to be part of an authentic attempt to reduce one's carbon footprint, but cannot be used as an excuse for inaction.

PER-OLOF FORSBERG/FLICKR. ANNA PELZER ON UNSPLASH. ALAMY

Carbonomics: Installing air-source heat pumps and buying electric cars are two ways to impact carbon footprint through consumer choice

Investments

Through my work at London Business School, I've become increasingly involved in questions of ESG investing and have written more fully on the topic elsewhere. I've concluded that the claims made for "sustainable investing" are vastly overblown, and naïve claims about the carbon-reduction impact of particular funds are misleading. This is what I have concluded on the possible ways to investing your money to do good:

1. screening or divestment seems to be at best ineffective and at worst counterproductive;
2. tilting away from 'worse' and towards 'better' companies in a given sector seems to have some benefits;
3. funds that engage robustly on climate issues seem to have some impact;
4. impact investing appears to have little effect, other than at the high-risk end of the spectrum with venture capital for moon-shot technologies;
5. ESG-integrated funds help to ensure that sustainability signals are more fully priced in markets, but will not push progress more rapidly than what is justified by financial value.

We've adopted a mix of 2, 3, and 5. The signalling matters. But at the same time, given the likely modest impact of sustainable investing, we're not completely subjugating our investment strategy to these approaches.

Work

I had some success last year in my final period at PwC in reducing unnecessary travel. I estimate that I saved two long-haul and several short-haul return flights by convincing clients that technology could enable my remote attendance at business meetings. I found the conversations surprisingly constructive, especially when framed in the context of footprint reduction.

Now that I've left PwC, I am looking at how I can deploy my skills in areas of work that directly support the development of solutions to climate problems. In this way, at least part of my work portfolio can make a direct contribution to meeting the climate challenge. My achievements so far are modest, but my work on responsible business and sustainable investment, as well as sharing my own personal experiences, are creating at least a tiny ripple in the pond.

Digging for victory: A plant-based diet "has significant and almost entirely beneficial impacts and no negative feedback loops"

Citizenship

Over the last year, I have found that behaviour change can lead to significant carbon savings. I'm confident we will halve our carbon footprint in 10 years, albeit from a very high baseline. But it has become equally clear that we will only achieve this as the result of putting significant research, time, money and effort into addressing the problem, coupled with a reduction in our standard of living (particularly in relation to travel). Given that we will probably only just attain our goal from such a high base, voluntary action seems unlikely to be a scalable solution. I am more convinced than ever that voluntary change by companies and citizens will only scratch the surface of what is required. Despite all the good work on ESG and sustainability, we're barely bending the curve of carbon emissions via that channel. Large-scale state intervention is needed in terms of:

- Product standards and regulation to encourage high levels of product efficiency
- Carbon pricing to create economic incentives to optimise use of whatever carbon budget remains, and regulation on a sector-by-sector basis to change the carbon pathway of key industries
- Allocation of public R&D investment to encourage the private sector to develop the new technologies, such as carbon capture and storage, which seem essential for any part of the solution
- Public education.

The response to COVID-19 shows what can be done quickly when circumstances dictate. Perhaps there will be greater acceptance of the need for the state to set a framework for action in the face of an economy-wide crisis. But the virus is an immediate and present danger, while climate change burns slow. And while we have seen what is possible, there's a risk the pandemic may lessen the appetite to act with similar decisiveness on climate change if it requires further sacrifice. While there are win-win solutions in cutting carbon, weaning ourselves off the black stuff will not be easy.

That's why personal and public action on climate change remain so important, including making clear to your political representatives that it's a crucial voting issue for you. Long-term, personal action alone cannot be the answer. But, if sufficiently widespread, it can create the context in which the necessary political change becomes achievable. □

Tom Gosling is Executive Fellow of Finance at London Business School

What difference does a diverse board make?

The results of a landmark new report into the composition of executive boards suggest that a more diverse boardroom means happy shareholders. **Randall S Peterson** and **Vyla Rollins** at the LBS Leadership Institute explain why

The boards of FTSE companies today look very different to how they did a decade ago. But while many boards have become noticeably more diverse, primarily in terms of the representation of women, relatively little research into the impacts of these changes had been done until recently. In partnership with London Business School's Leadership Institute and SQW, the Financial Reporting Council (FRC) set out to change that, with the most comprehensive study of board diversity and effectiveness in FTSE 350 companies yet.

The unique research methodology used quantitative and qualitative data, including extensive interviews with over 75 senior board members in FTSE organisations and an assessment of boardroom interactions, to assess the impact of shifting dynamics in the boardroom and how progress can be accelerated. The primary focus of the report is on demographic diversity, rather than individual differences such as personality, functional diversity or neurodiversity.

London Business School's Randall S Peterson and Vyla Rollins

explain why the report's findings are a watershed moment in advancing diversity in the boardroom and in business more broadly.

Why is board effectiveness so important and how does it relate to diversity?

"Look around," says Vyla Rollins. "There's no denying we're living through turbulent times. In order to operate successfully in a hyperconnected, ever-changing business landscape, organisations must be resilient. Many organisations are also becoming larger, making them more complex and putting more jobs on the line when challenges arise."

Diversity is key for organisations trying to move towards a more sustainable way of operating. Diverse perspectives at board level can help organisations better address their global and local impacts by offering additional insights into the different communities affected by their work. Vyla elaborates, "There is so much evidence-based insight out there that shows us that diverse groups or teams that are proactively managed can make a real difference to an organisation's bottom line. That bottom line is what allows them to operate and prosper."

There have been many studies into strategies for effective leadership but, until now, researchers have been unable to prove that there is a correlation between diversity and effectiveness at board level.

Vyla explains, "We were really keen to provide substantive analysis to help us move on from the 'business-case argument' for diversity. What I mean by this is, over the past 20 years we've seen a case made based on the value a diverse board brings to an organisation, their boards and their stakeholders. This is often referred to as 'the business case for diversity'. That said, research over the past 15 years has shown that promoting the business case can be problematic, because it places an added burden on marginalised groups that is simply not expected of those who don't experience inequities. This evidence-based finding is also exacerbated by the fact that ›

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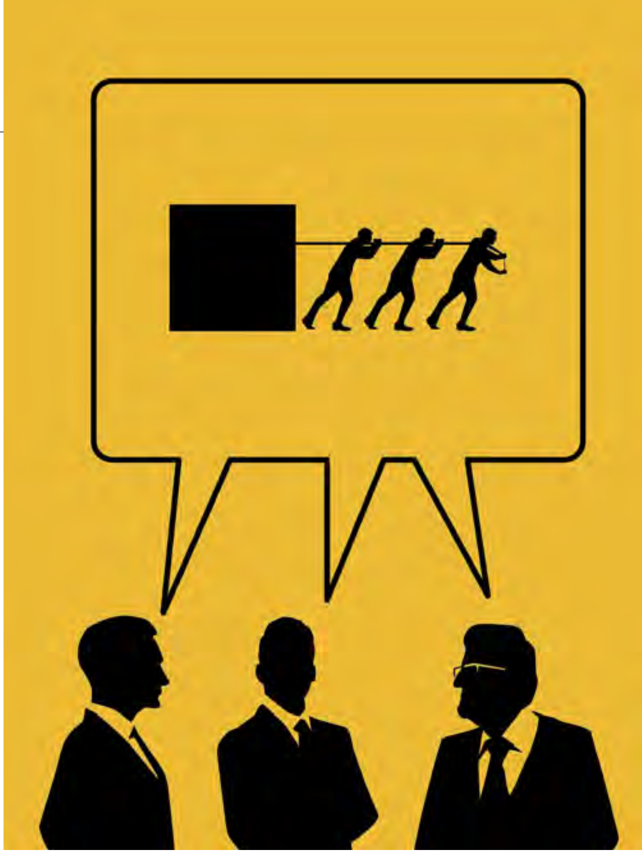

increasing the numbers of underrepresented constituencies on your board, or within your workforce, does not automatically produce benefits. To reap the benefits of the multiple aspects of the concept of diversity, one of the critical factors required is the active and mindful facilitation of diverse groups."

What do we even mean by 'diversity'?

"One area where we've been successful in moving the conversation forward has been in interrogating what we actually mean by 'diverse,", Vyla says. "When Randall and I were putting together the research protocol, we discussed different working definitions we could use. In the end, we decided that we just needed to put the question out there and see what people came back with – we had the hypothesis that part of the difficulty boards or organisations face in cultivating 'diversity' is that people often have vastly different working definitions of what that means."

Was it worth it? "I believe it was one of the most pivotal decisions we made in thinking about how we would approach the research. As we thought, it showed us how differently people think about diversity, which types of diversity were top of mind for them and their organisations, and which types they didn't mention at all." Vyla believes there is a lesson for scholars and practitioners here. "We need to keep these variations in mind as we continue to discuss diversity and not miss the opportunity to keep on raising awareness about the full spectrum of diversity that exists."

What can we learn from progress on gender diversity?

While the report also assessed ethnic and socioeconomic diversity at board level, far more progress has already been made in terms of gender diversity – meaning there's more data available on the effects of increased numbers of women in the boardroom. While the typical board member is still a white male with at least one degree from an elite university, around 36% of board members at FTSE 100 companies are women. In fact, more than half of FTSE 350 companies have exceeded the Hampton-Alexander Review target of 33% female board members. The research also found that boards with higher levels of gender diversity enjoyed higher stock returns and were less likely to experience shareholder dissent. Common features of boards with more women include:

- a decentralised approach to how they operate, with stronger committees
- more instances of a consensus being reached before important decisions and fewer major decisions being opposed by substantial chunks of the board
- greater focus on a fairer approach to recruiting new directors
- reduced overconfidence in the board's problem-solving skills.

On top of this, the research indicates a number of other, less-tangible benefits to demographic diversity. These include increased firm reputation, greater focus on corporate social responsibility and higher levels of innovation.

Diversity is a long-term investment – but it's worth it

Diverse boards create an opportunity to draw on a wider pool of information, perspectives and competencies in order to make decisions and drive change. This tends to lead to better, more sustainable outcomes – but it's not without challenges.

The first challenge is simply sorting through the varying perspectives to identify the ideas that will create the most impact. All too easily, board members can end up talking at cross purposes or past each other, or just trying to promote their own view. If this begins to interfere with the board's social cohesion, relationships can quickly sour. If conflicting views are allowed to morph into personal conflict, negative assumptions, factions and misunderstandings quickly flourish. This not only creates an unpleasant working environment for board members, but damages their collective output by reducing information sharing and debate. To avoid this, boards need to recognise that building and maintaining diversity requires not just proactive planning, but consistent monitoring, prioritisation and cultivation.

Moreover, leaders need to be in it for the long haul. According to Professor Peterson, "On average, our data indicate that it takes around three to five years for organisations to start seeing a marked business benefit that extends beyond the remit of an individual board member's day-to-day role."

'This isn't just about altruism – it's about how organisations start to work together to tackle this phenomenon across the business community'

It's helpful to think of this time as not just the cost period for an organisation, but a window to maximise opportunity. In fact, the report found, time and time again, that the organisations that were willing to invest in diversity because they believed it's 'the right thing to do' were the same organisations that ultimately

enjoyed the most extensive business benefit. "If we look at the people who are doing well, it's not one demographic or sector – it's places with a positive culture around inclusion of diverse backgrounds and perspectives," says Professor Peterson.

A growth mindset is key

Leaders working to diversify their cohorts will inevitably make mistakes. The good news is that accepting that inevitability means they will be adopting a 'growth-mindset' approach to diversity – taking a learning and developmental approach to working to diversify, and focusing on building their capabilities, skills and mindsets with respect to diversity as time progresses.

Adopting a learning mindset in the boardroom helps directors overcome a sometimes paralysing fear of doing the wrong thing. "If you look at the boards that had really positive stories, it all comes down to behaviours," says Professor Peterson. The researchers suggest that board members should take a moment to ask themselves what went well after every meeting, what didn't go so well, and what could they learn. Setting aside time to reflect on this leads to more productive meetings and therefore more effective boards. As Vyla observes, "You can't think your way into cultivating diversity or making change. You have to be confident enough to actually try some different things and start having some different conversations."

Establish clear rules of engagement

Other recommendations from the report include establishing clear and transparent rules of engagement across the whole organisation, encouraging a culture that rewards information-sharing, and managing offline conversations between board members.

Many boards have also found that they need to recruit by skills, rather than position to get diverse candidates through the door. Professor Peterson explains that, all too often, directors find themselves in the difficult position of trying to hit their diversity targets while also recruiting from a small pool of mostly white, male senior leaders. "If you're looking for a CEO or a CFO, but you're also looking for a woman or someone who isn't white, that's a very tight brief. The pool of diverse talent at that level isn't as small as some people would have you believe, but it isn't endless either. Focusing instead on how individuals could bring the desired skills to the table with a non-traditional set of experiences suddenly opens the door to a much broader range of candidates."

Board members also need to be willing to invest in building junior talent, so that they'll be ready when the time comes to step into leadership roles, says Professor Peterson. "Some of the boards that were really invested in nurturing talent had made individual directors responsible for a network of potential candidates from all kinds of backgrounds."

There's no guarantee that all these candidates will be offered a job with a specific organisation, but a willingness to mentor diverse talent in order to prepare them for future opportunities could enrich the whole sector. Vyla believes it's a question of responsibility. "We support existing guidance that states that the continued professional development of board members is one of the responsibilities of the board chair. Let's start thinking about what it would look like to expand that definition to include individuals who have a lot of potential to ultimately sit on a board, but maybe need some strong support and sponsorship to help accelerate their board readiness. I believe the business community needs to think about this as a collective action. This isn't just about altruism – it's about how organisations start to work together to tackle this phenomenon across the business community."

This is just the beginning

The report makes a strong statement about how diversity is not only an ethical imperative, but is also a tool for improving organisations – but there is still a long way to go. Despite huge advancements in gender equality, women still only account for 3% of executive director and chair roles. There's an even longer journey ahead in terms of ethnic diversity. In 2020, just 7% of directors came from an ethnic minority background. Overall, 59% of FTSE 350 companies fell short of the target set by the Parker Review in 2017 of having at least one director from an ethnic minority background, and the 2020 update revealed very little change. Professor Peterson hopes the report will motivate firms to move forward with pursuing their targets – as well as encouraging discussions about why progress can be slow. "We need to open the conversation, even when it's challenging, and be able to talk openly about how we continue to change to create boards that represent their workforce and customers."

For Vyla, getting people to think differently about diversity is key. "It's great to be able to share evidence-based insights, but for those insights to have any impact, we have to get people not only talking and thinking differently, but ultimately doing things differently. I'm proud of the conversations and actions we've already contributed to that have manifested in organisations since the publication of the report." ◻

Randall S Peterson is Professor of Organisational Behaviour; Academic Director, Leadership Institute at London Business School. Vyla Rollins is Executive Director of the Leadership Institute at London Business School.

ILLUSTRATION: EDUARDO LUZZATTI

Sustainable financial reporting for investors: a blueprint for global standards

Corporate sustainability reporting is bedevilled by inconsistent metrics across the world and the lack of a single, authoritative standard-setting body. After extensive consultation, the IFRS Foundation has put proposals together to make up this deficiency. Foundation trustee **Lucrezia Reichlin** identifies the key elements of the proposals and their aims

Perhaps the first point to make is that the IFRS Foundation did not seek to become involved in plans to bring some measure of standardisation to the currently fragmented landscape of sustainability reporting. Instead, we were pulled into this space by demand from investors and others for action.

Nor did we rush to give ourselves a key role in any new arrangements. The Foundation carried out extensive consultation last year to try to gauge two essential factors. First, was there a demand for global sustainability standards? Second, if the answer was yes, should the Foundation play a part?

On the first question, we found growing and urgent demand for global standards to improve consistency and comparability. On the second, we found broad support for a role for the Foundation.

These responses led, in turn, to two further questions. Should the Foundation establish a new board to set standards for sustainability reporting, and what would its priorities be?

In terms of priorities, there was no doubt that climate change topped the list. The matter of a new board at the Foundation spurred detailed work in this area, leading to a complete blueprint for an International Sustainability Standards Board, to sit alongside the well-established International Accounting Standards Board. It is envisaged that the two Boards will work closely together. This is important, since risks related to sustainability have an impact on financial accounts.

Sustainability reporting is evolving, so it's perhaps unsurprising that many different and sometimes conflicting metrics are being used, resulting in confusion for companies, investors and the wider public. There is a growing and urgent demand for consistency of reporting and comparability. Indeed, both the International Organisation of Securities Commissions (IOSCO) and the finance ministers and central bankers represented in the Group of Seven (G7) leading economies and the G20 have lent their support to the creation of a new board that will develop global baseline standards.

We analysed the feedback from our consultation and used it to draw up four key principles for the strategic direction of the proposed Board.

The first was that the sustainability reporting would be investor-focused. This principle fell naturally into two parts; a demand side and a supply side. ›

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In the former, investors wanted more useful, globally comparable sustainability information that would allow them to assess more accurately the sustainability risks and opportunities involved with each company, leading to better informed asset-allocation decisions.

Regarding the latter, we considered that the IFRS Foundation was well placed to supply the clarity and certainty of sustainability reporting sought by investors. The Foundation has two decades' experience of service to investors and other capital market participants; it has an established model of governance, standard-setting expertise and well-recognised due process; and it offers the potential for synergies between sustainability standards and IFRS accounting standards.

Sustainability reporting ought, we concluded, to look at likely effects on "enterprise value" over the short, medium and long term, this being the bedrock on which investors can base decisions of asset allocation. This investor focus is very much in our DNA and other bodies, better placed than we are to address the broader societal needs of sustainability reporting, will, we hope, do just that.

Initial support: Canadian Finance Minister Chrystia Freeland has offered seed funding to the nascent ISSB

That said, we would expect enterprise value and social value to be highly interdependent.

Our second principle was that the proposed board would not be starting from scratch. Given there are existing investor-focused, voluntary sustainable reporting initiatives on which to build, there was no need to reinvent the wheel.

Instead, we would develop existing relationships with such bodies as the Task Force on Climate-related Financial Disclosures (TCFD), the World Economic Forum, the Value Reporting Foundation and the Climate Disclosure Standards Board.

We are working together with these organisations through a Technical Readiness Working Group to accelerate the convergence of their voluntary standards. We are also discussing full consolidation of the investor-focused sustainability standard setters as an option. IOSCO and IPSASB are attending the working group as observers.

Our third principle is that there should be a global baseline of reporting standards upon which different jurisdictions can, if they wish, add further reporting requirements in line with local needs and policy goals. This baseline can best be envisaged as three building blocks.

At the bottom is conventional financial reporting as it has always been practised, informing investors on the condition of the company expressed in monetary data.

Next come sustainability related financial disclosures, spelling out for investors any sustainability matters that may reasonably be expected to create or erode enterprise value over the short, medium and long term.

The third and final building block widens the focus from solely investors to take in the broader group of stakeholders. Here,

World first: Protesters at a meeting of EU finance ministers and Central Bank officials highlight that sustainability is the central issue of our time

‘We established the principle of climate first, not climate only. We have to start somewhere, and climate change is the issue of the hour’

disclosures will relate to all factors that can reasonably be expected to have a positive or negative impact on people, the economy or the environment.

Finally, we established the principle of “climate first, not climate only”. We have to start somewhere, and climate change is the issue of the hour. But we expect to move at speed to meet investor need for other sustainability-related disclosures; all the time leveraging the work of existing standard setters.

If all proceeds smoothly, the proposed International Sustainability Standards Board will be an organisation of enormous importance in the life of businesses round the world. This makes it imperative that the board displays the highest levels of corporate governance and accountability to stakeholders.

To this end, we propose 14 board members; the majority of whom will be full time, selected on the basis of both professional experience and the diversity of such experience. The search for the Chair and Vice Chair has already started.

In addition to the Technical Readiness Working Group, we have formed a Multilateral Working Group, undertaking preparatory work on the connection between the global baseline standards from the Board and the requirements of different jurisdictions across the world. We recognise that countries may have different levels of ambition with regard to sustainability reporting, reflecting public policy considerations. But we have to make sure that the baseline is common so as to avoid excessive complications for preparers operating in multiple jurisdictions. The input of securities regulators for the construction of the baseline is therefore important, so we envisage that the multilateral working group will be a feature of the new governance once the new board is established. (It should be stressed that countries will have a variety of models for integrating the standards in local legislation.)

Legitimacy of standard setters comes from appropriate governance. This is the strength of the IFRS’s three-tier governance structure. Public accountability derives from IFRS Foundation Monitoring Board chaired by IOSCO and includes securities regulators, as well as the European Commission and, in some cases, the Ministry of Finance. The IFRS Foundation Trustees are responsible for oversight and strategy, while the standard-setting boards are responsible for developing the technical-content standards.

Funding for the Board is clearly an important issue and comes under two headings. One is the need for seed capital to create the Board and support it through its early years. The other is access to diversified funding for the medium and longer term.

In July a meeting of the IFRS Foundation trustees was told that Canada’s Deputy Prime Minister and Finance Minister Chrystia Freeland had written a letter on behalf of Canada’s government “and a coalition of over 55 Canadian public and private institutions” which “expressed support for the proposed ISSB and offered seed capital... from a broad coalition of Canadian public and private institutions to fully support the initial period of the ISSB’s operations.”

Ms Freeland wrote: “The development of global sustainability standards by the ISSB, within the robust governance structure of the IFRS Foundation, would help address the need for more consistent, comparable and decision-useful reporting on climate change and other environmental, social and governance factors.”

Chair of the Trustees Erkki Liikanen welcomed the support, saying: “[The Trustees] noted amongst other things that the letter acknowledged the independence of the IFRS Foundation’s standard-setting operations and explained how Canada would be able to support and facilitate establishing an organisation with a global professional workforce.”

I stress that this remains a “potential” board and we are now analysing feedback on our consultation before reaching a final decision. Fittingly, we will reach that decision by the time of the UN Climate Change Conference, COP26, in Glasgow this November.

Many people and organisations are willing us to succeed in this endeavour and we have been cheered by all the support and goodwill. To some, accounting standards may seem a dry-as-dust topic – but, as COP26 shows, sustainability is the central issue of our time. ◻

Lucrezia Reichlin is Professor of Economics at London Business School

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What 'effortlessly green' means for marketeers – and the planet

The results of new research by **Dafna Goor** show how marketing can navigate the concept of psychological entitlement to harness consumer choices for the greater good

Consumers today have more environmentally friendly options to choose from than ever. They also have access to a vast breadth of information on why these choices are so important. In fact, public awareness of environmental concerns and their possible remedies is at an all-time high. So why do some of us still choose standard products over greener alternatives?

Dafna Goor, Assistant Professor of Marketing at London Business School, has been exploring the psychology of consumer habits for years. Her ongoing research, *Effortlessly Green: When and Why Effort Impacts Environmentally Friendly Consumption*, examines the relationship between "feelings of deservingness" and product choices across various contexts and areas of consumption. Working in collaboration with IDC's Dr Yonat Zwebner, Dr Goor and her research team found that expending effort heightens consumers' sense of individual deservingness, which in turn lowers their preference for environmentally friendly products.

Finding inspiration in unusual places

In early 2020, Dr Goor was involved in a pilot study investigating consumers' motivations for choosing eco-friendly products. She'd been working with a household-name organisation to detect when their customers were buying 'green' options. "We used machine learning to sort through millions of transactions a month and we found that customers were more likely to go for a greener option in the morning. This was the first indication that something interesting was happening."

What did she suspect was driving this pattern? "I've always been interested in the idea of psychological entitlement. It's not an area that has been widely researched within a marketing context, yet it impacts consumer behaviour quite a bit. I suspected that exerting effort made people feel generally more deserving and therefore less likely to make a pro-social or 'greener' choice."

'I've always been interested in the idea of psychological entitlement. It's not an area that has been widely researched within a marketing context, yet it impacts consumer behaviour quite a bit'

Inspiration for the next phase of her investigations didn't strike in a lab or research centre, but at the gym. "I was leaving my gym in Israel one day in January and I noticed they were giving out plastic straws to customers who bought cold drinks. I was thinking, 'Why don't you have an eco-friendly option? Haven't you seen the turtle video?'."

She reached out to the gym owners and they agreed to participate in an experiment: users would be offered a choice of standard or environmentally friendly straws. "Although one straw was made of plastic and the other was made of cornstarch, they looked and felt the same," she explains. The two boxes of straws were clearly labelled and positioned next to each other on the counter. A research assistant watched gym users come and go, documenting their choices.

The assistant spent a few hours a day observing purchases over a 16-day period, observing a total of 106 interactions. The researcher found that, in general, gym-goers chose the eco-friendly straw, but were less likely to choose it after their workout. For Dr Goor, this was a turning point. "We knew then that it wasn't just about how people feel in the morning verses the afternoon or evening, but something deeper."

Confirming the theory in the lab

Eight months later Dr Goor took her theory to the lab. Participants were randomly assigned to tasks of varying difficulty. In one experiment, two groups were given an extract from a Shakespeare play. People in Group A were given a fairly straightforward task, such as finding the second word in the first line of the extract and underlining it. Group B were asked to find more words in longer, more complicated lines.

Afterwards, both groups were told that, as a gesture of appreciation for their participation in the study, they would be entered into a raffle. There were two prizes up for grabs: a standard reusable water bottle and an eco-friendly bottle. Participants were asked to indicate their preference. Almost always, those who'd completed the harder task chose the standard water bottle, while those who'd been given the easier task went for the greener option.

It might be easy to take a gloomy view of what the results tell us about human nature, but Dr Goor doesn't think we should be too

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quick to judge. "I don't think what we're seeing is malicious. Egocentric, yes. But not necessarily deliberate." What does she think is driving their choices? "When people's resources are depleted, they become more focused on themselves. They don't have the mental energy to think about larger concerns."

The Shakespeare experiment has now been replicated dozens of times, across two different labs. "The results by now are pretty robust. We've experimented with different products and stimuli and we see the same thing every time – the more effort someone expends, the less likely they are to choose the green option." Participants have been asked to choose between everything from different types of pens and plates to a complementary journey on either an electric or a standard train. Dr Goor explains, "It doesn't seem to matter if it's a souvenir or an experience that participants would be consuming – the results are the same every time."

The team has also experimented with different populations. "We've worked with Britons, Israelis and Americans and we've explored different groups within those populations. Some of the people we've interviewed are students, but many of them were just people who sign up for random surveys. We've also been meeting real consumers in the gym or on ecommerce platforms."

Harnessing purchasing power for the greater good

How does Dr Goor marry her findings with the need to move towards a more sustainable future? "Well, although what we've been looking at is what drives people away from the greener option, we can use the results of our research to encourage the reverse."

The simplest approach is to target consumers during the times they are most likely to buy green – but Dr Goor believes we can go further: "Getting green products in front of people earlier in the day is good, but we should be looking at designing experiences that encourage people to make greener choices in any situation. If we can create relaxing, stress-free shopping experiences or experiences that remind people of times they've felt that way, we could nudge them towards making better choices."

For Dr Goor, the possibility of positively impacting consumers' choices proves how worthwhile the study of marketing can be. "Every now and then one of my marketing students will ask me what the point of our work is. Aren't we just getting people to buy more things they don't need? I think results like ours show how marketing has the potential to help people make choices that are better for them and better for the planet. It's not about forcing people to do things they don't want to do, but about how we can harness people's purchasing power for the greater good."

Understanding sustainable choices

Going forwards, Dr Goor wants to explore if the 'effortlessly green' phenomenon generalises across other pro-social acts. "We know people are less likely to choose a greener product after a long day, but would this also apply to helping a stranger or giving money to charity? I want to see how psychological entitlement plays out across other ethical issues."

She also wants to explore some interesting questions within sustainability. "Another thing I'm interested in is looking at how people feel about greener options across different product categories. There's been some research that suggests people have negative assumptions about the cleaning power of eco-friendly detergents. But the same people will rush out to buy 'natural' skincare products. Understanding the psychology of these decisions is going to be key to understanding what motivates someone to shop more sustainably." □

Dafna Goor is Assistant Professor of Marketing at London Business School.

Get out or go in? Changing corporate environmental behaviour via shareholder activism

A new research paper by **Lakshmi Naaraayanan**, **Kunal Sachdeva** and **Varun Sharma** highlights how activist engagement can force firms to achieve meaningful ESG goals

Shareholder activism for social and environmental responsibility is an ever-present phenomenon in the world of publicly listed companies today and, following a decrease in activist campaigns after the outbreak of the Covid-19 pandemic, is on the increase again globally.

Once the preserve of ethical activists intent on forcing funds to divest themselves of investments in "sin" industries, the idealists have been joined by a growing number of hedge funds. According to the July 2021 PwC report 'The director's guide to shareholder activism', hedge funds "are increasingly focused on ESG as a catalyst for their activist campaigns [because] they see a connection between ESG performance and shareholder value. Several funds that have launched recently put the connection between sustainable practices and value creation at the centre of their missions."

According to Lazard's Capital Markets Advisory Group review of shareholder activism for the first half of 2021, 94 new campaigns were initiated around the world in the first six months of this year. The 55 campaigns launched in the US represented a 31% increase over the corresponding 2020 period; 10 campaigns were launched at Japanese targets (making the 26% share of non-US activity represented by Japanese targets the highest in recent years); while Europe saw 21 new initiatives, including campaigns by Elliott aimed at pharmaceutical giant GlaxoSmithKline, and Bluebell's campaigns targeting food-products multinational Danone and media conglomerate Vivendi.

Among these campaigns were some apparent high-profile successes. In Japan, for example, the ousting of Toshiba's chairman and another director at the company's 2021 AGM in the wake of allegations of collusion to influence shareholder votes was widely heralded as a watershed moment, and one that may serve to catalyse more reforms of Japan's system of corporate governance.

Similarly, the campaign this summer by activist hedge fund Engine No. 1 that targeted ExxonMobil – in which the fund toppled three of the US energy giant's 12 board members – was notable not merely because it made the oil giant the largest shares issuer ever to lose a proxy fight, but because it garnered broad shareholder support across the US "big three" passive fund managers, pensions funds and active managers. Founded by veterans in the investment industry, Engine No. 1's campaign included the demand that Exxon should "implement a strategic plan for sustainable value creation in a changing world by fully exploring growth areas, including more significant investment in clean energy, to help the Company profitably diversify and ensure it can commit to emission reduction targets, as well as optimization of commercial operations."

Given that the hedge fund was only six months old, its campaign was remarkably successful in forcing its way onto Exxon's board. But how likely is it to achieve its declared aim of forcing it to commit to emission-reduction targets?

While there is a great deal of research into how activist shareholders can affect firm governance and financial performance, and a growing body of research studying investor preferences for socially responsible investments, there are few extant studies aimed at gauging the real effects of environmental activism on pollution and the environment – and almost no academic evidence concerning the efficacy of engagement by pension funds aimed at improving companies' environmental impact.

So, can shareholder activism through engagement actually change corporate environmental behaviour? That was the question Lakshmi Naaraayanan, Kunal Sachdeva and Varun Sharma set out to address in a research paper entitled 'The Real Effects of Environmental Activist Investing'. To answer it, the researchers used the results of the Boardroom Accountability Project (BAP), a campaign initiated in 2014 by a coalition of New York City's five pension funds, worth a combined $160 billion. The investor coalition targeted 181 firms in total (including 33 from the fossil-fuel industry) which – among other objections to firm performance – the coalition claimed were not addressing climate-change risks.

> 'Over time, the interests of Main Street and Wall Street align, and we can engage as active owners to create value by focusing on this alignment'

To isolate the effects of the BAP campaign, the researchers used a

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Finally, the study found that, in the short term, financial performance of targeted firms deteriorated when compared to non-targeted firms in the same industries (given the weak statistical significance, the researchers advise caution in interpreting this finding).

An important study into the actual effects of shareholder activism on firm behaviour – the paper was awarded the 2020 Moskowitz Prize, one of the most prestigious research awards in sustainable finance – the findings also have key implications for environmental activist behaviour in broader terms.

Historically, much environmentalist activity has focused on forcing funds to divest from sin industries – but research suggests that divestment often comes at the cost of lower returns for the investors. Moreover, divestment is not usually an option for most large pension funds and universal owners; hence the growing trend among such investors to engage with companies to force them to improve environmental performance.

Equally importantly, Dr. Naaraayanan argues, "Divestment cannot be guaranteed to achieve social goals, because by definition it means that investors 'lose their voice' as part-owners of the targeted firm." The alternative is activism through engagement, "which enables activist shareholders to pressure managers to address climate change."

The new research shows that, as Dr.

difference-in-differences empirical methodology to identify the real effects of environmental activism on firm environmental behaviour. This was done by comparing the targeted firms with a control group of non-targeted companies in the same industries who had similar sustainability track records and financial characteristics.

Four findings

The study produced four main findings. First, it did indeed provide evidence that environmental activism can affect the environmental performance of targeted firms: plants of those targeted responded to the campaign by reducing their total toxic chemical releases by 13% on average, with active on-site reductions in releases the main driver of overall improvements.

Second, the study found that the campaign had positive externalities on the local economies around plants of targeted firms. Dr. Naaraayanan says: "Using air-quality monitor data within a one-mile radius around targeted plants, we found a significant drop in emissions affecting public health and reductions in cancer-causing chemicals. Overall, the results suggest that reductions in emissions around targeting positively impact the local communities near plants of targeted firms."

The third significant finding was that the plants achieved the reductions largely through abatement initiatives, such as improved operating practices and new measures to prevent spills and leaks, rather than changing their production activities (which could lead to increased production).

Naaraayanan says, "Co-ordinated action by large institutional shareholders, combined with the threat of discipline, can influence corporate behaviour at board level such that firms take action to mitigate their environmental impact."

For investors such as pension funds and universal owners, the findings suggest that, because engagement can lead to positive externalities for local populations, it offers, alongside regulation, a complementary path to address climate change risks.

Engine No. 1's website bears this proud boast: "We are Engine No. 1 – an impact investment group purpose-built to create long-term value by harnessing the power of capitalism. We believe a company's performance is greatly enhanced by the investments it makes in its employees, customers, communities, and the environment. We believe that, over time, the interests of Main Street and Wall Street align, and we can engage as active owners to create value by focusing on this alignment."

The latest research findings by Dr. Naaraayanan and his colleagues certainly lend credibility to that belief. ◻

'The Real Effects of Environmental Activist Investing' is available without charge from: http://ssrn.com/abstract_id=3483692

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Do bosses do bad when the going's been good?

Intriguing research by **Aharon Mohliver** and **Emily C. Bianchi** suggests that CEOs are more likely to cheat in relatively prosperous times than in lean days

One might think, intuitively, that economic recessions are conducive to corporate misconduct. Governments rein in public spending, private sector investment is harder to come by, consumer spending goes down and corporate profits shrink – all reasons why firms are likely to incur losses, and why the CEO might be tempted to break the rules to recover deficits.

And, if it is the case that bosses are more likely to engage in illegal behaviour when their businesses are feeling the pinch, the implied corollary is that in good times they are more ethical. Resources are plentiful in boom times – why cheat when you're winning anyway?

Unfortunately, much recent history tells us that that is not necessarily so. In mid-1980s America, for example, rapidly increasing prosperity was accompanied by innumerable corporate scandals, including the epic failure of Lincoln Savings and Loan Association, which saw five US senators embroiled in a corruption scandal. By the end of the decade, more than half of all US savings and loans (S&L) banks had failed and more than 1,000 senior executives in the financial services sector were arraigned on federal indictments. Undoubtedly, deregulation and ballooning speculative risk-taking contributed greatly to the S&L crisis. Similarly, the internet-fuelled boom of the late 1990s was accompanied by widespread financial misconduct by CEOs at major US corporations, including Enron, WorldCom and Tyco.

Twin theses

On the obverse of the coin, people are generally more risk-averse and more alert to fraudulent behaviour of others. This would support the theory that bosses are less likely to resort to corporate misconduct in lean times.

This led to two hypotheses that Aharon Mohliver and Emily C. Bianchi set out to test in a paper entitled 'Do Good Times Breed Cheats? Prosperous Times Have Immediate and Lasting Implications for CEO Misconduct', originally published in *Organization Science* in December 2016.

The first hypothesis was that CEOs will be less likely to utilise unethical business practices during bad economic times and more likely to do so during good economic times; the second was that economic conditions have a long-lasting effect on fresh employees – and actually change their ethical baseline.

Given the paper's title, it will be readily apparent that the researchers did, indeed, find a strong association between economic prosperity and CEO misconduct.

The design methodology

But how to show such an association empirically? What was truly original in the paper was the research setting and design methodology, given that offenders are hardly likely to self-report misconduct. To analyse CEO behaviour, Mohliver and Bianchi identified just over 2,000 CEOs of US publicly traded companies between 1996 and 2005 who received non-scheduled stock option grants, and gauged corporate misconduct by examining the likelihood that each stock option awarded during this time was backdated – "an unobtrusive indicator of unethical behaviour."

> "CEOs who had begun their careers in a boom were more likely to cheat"

Long considered highly unethical, if not outright illegal, options backdating is where a firm issues a stock option to a CEO on one date but the CEO reports to the regulator (in the US, the Securities and Exchange Commission (SEC)) that the option was assigned at an earlier date when the stock price was lower – thereby realising a greater gain on the options than if the date had been accurately reported. (Say, for example, the company issues the CEO with stock options on a day when its stock price is $100, but the CEO falsely reports that the options were issued a week earlier when the stock price was $80; the CEO nets the difference of $20 per share when they exercise the option). ›

WORDS: NICK MICKSHIK PHOTOGRAPH: MARK MATHER

Explicitly outlawed only in a 2006 SEC ruling, options backdating requires intentionally falsifying multiple financial documents that are submitted to investors and the SEC – an act that violates the law.

Identifying backdating, however, does not require that the firm involved is caught falsifying the documents. Because managers cannot predict whether the price of a stock will go up or down in the very short term, examining the price trends before and after a stock option grant is issued is a useful proxy for unethical behaviour – if the price drops until the date a grant is officially reported then rises in the following days, it is either an extremely lucky grant or a backdated one. Mohliver and Bianchi used instances of extreme luck as a proxy for cheating: if you think of the stock price within the possible reporting window as a lottery ticket, two CEOs in a hundred should have guessed the lowest price-point date. The data shows that, instead of two lucky winners, 15 CEOs managed to "guess" the date.

Mohliver and Bianchi created a benchmark of how likely it is that an option is truly lucky; an example is shown in Figure 1 using a grant reported by Gregory Reyes, CEO of Brocade in 2000, who became the first person to be convicted of fraudulent backdating of corporate stock options in August 2007. The option Reyes received would need to be very lucky indeed (within 5% of the luckiest possible dates for such an award). Based on the date the options were reported to the SEC, Reyes could have received the stock any time between 26 April and 7 June 2000. Brocade's stock fluctuated substantially during that time, from a high of $182 in late April to a low of $119 in late May.

Testing hypothesis 2

To test hypothesis 2 – that CEOs who begin their career in prosperous times are more likely to backdate their stock option grant – the researchers collected information on the educational history of every CEO in the sample, including where they went to school, degree and year of graduation, which they then matched with the prevailing unemployment rate at the time of their graduation. They then examined whether the CEOs who earned their highest degrees when the unemployment rate was particularly low (a proxy for good economic times) were more likely to backdate their stock options.

The findings

The findings were clear: even after adjusting for firm size, industry, number of options granted and other factors, CEOs graduating in the best economic times were around 30% more likely to falsify the issue dates of their stock options than those graduating in the worst times.

Unwanted first: Brocade CEO Greg Reyes was convicted of fraudulent stock options backdating in 2007

Figure 1. Identifying suspiciously lucky grants

Illustration of the identification strategy for suspiciously lucky grants using the stock price around a grant date for Gregory Reyes, CEO of Brocade Corporation

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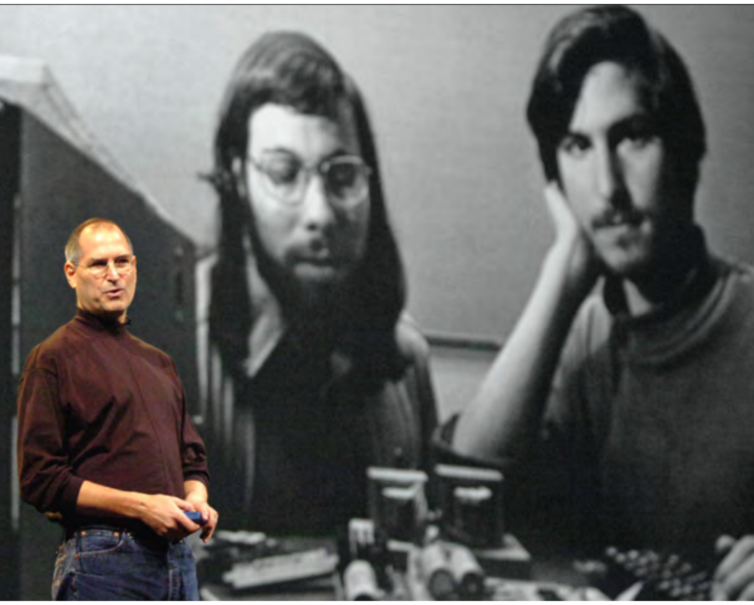

Bad, Apple: Steve Jobs was involved in a backdating scandal after he was awarded 7.5 million company shares on August 29 2001 that were not reported until December that year, making him $20 million richer on paper

In other words, CEOs who had begun their careers in a boom were more likely to bust the rules. By controlling for factors such as size of company led and type of industry, the authors were able to show that the prevailing conditions of their early careers predicted the CEOs' propensity to falsely report stock option awards later in their careers, thereby lending support to their hypothesis that entering the workforce in prosperous times predicts later unethical behaviour.

Ruling out alternative explanations

But there is an alternative explanation to this finding: that individuals who enter the job market during a recession are different from those who choose not to do so. For example, when the economy falters, students who can afford to continue their education and wait until the market recovers do so, but those who cannot are forced to find a job. This can mean that economic conditions dictate who enters the job market, rather than influencing their perception of what is right and what is wrong.

The authors addressed this alternative by looking at the unemployment rate when the CEOs in their sample turned 22 (the common graduation age in the USA). They found that the unemployment rate at the age of 22 predicts future backdating – convincing evidence that the economic conditions at the time of graduation change CEOs' ethical baseline. (It is, of course, impossible for anyone to "time" when they are born to coincide with economic booms exactly 22 years later.) If the economic conditions when turning 22 predict whether a CEO will backdate their stock option grants, this implies it really does change something about how these CEOs perceive what is right and what is wrong.

Mohliver is quick to highlight two limitations of the research. First, because the economic conditions during the period of time in question fluctuated only modestly, the test of Hypothesis 1 (that CEOs will be less likely to adopt unethical business practices during bad economic times and more likely to resort to them during good times) was partly constrained. Nonetheless, the fact that the research setting still generated significant results suggests that "even small economic changes can have meaningful implications for ethical behaviour, and large shocks may have even stronger effects on unethical behaviours." Second, there are other possible explanations for the results. As Mohliver says, while beginning one's career in prosperous times may impact the "mental models that new entrants form about ethically acceptable practices and norms, our study does not elucidate the social and psychological processes that generate this effect."

Broader implications

These limitations notwithstanding, the research has some novel and startling implications regarding likely contributory factors of corporate bad behaviour. Whereas research into the subject has tended to focus on how more direct factors such as financial incentives affect the likelihood of corporate leaders cheating, the findings highlight that indirect factors that are completely outside the firm's agency can do so. In other words, the paper shows how something that happened 10 or even 20 years ago can permanently change ethical behaviours.

As Mohliver and Bianchi put it in their original paper, the research contributes to the growing understanding "of the mark that early career conditions can leave on later attitudes and behaviours" by suggesting that "strong, diffuse situations and experiences can shape ethical behaviour in the present and well into the future."

The findings have implications beyond the realm of corporate governance in that they contribute to the understanding of how economic conditions and social norms are impacting each other. Mohliver says: "Past work on the formation of ethical systems has suggested that the family and educational institutions are the main influences in shaping individual moral values; these findings suggest that strong experiences outside childhood and formal education also influence the moral tendencies of corporate leaders.

"The paper also highlights the relative malleability of ethical behaviour to prevailing economic conditions – when the economy was doing well, all CEOs in our sample appeared more likely to backdate options, including those who began their corporate careers in a recession. This implies not only that early experiences appear to influence the 'baseline' propensity to cheat, but that economic conditions can move the baseline up or down."

There are also implications for firms looking to identify recruits who may be more likely to behave ethically as employees. One could be to accord a positive weighting to "recession graduates". Mohliver says: "Other research suggests that these graduates tend to be more satisfied employees, remain with their companies longer, and are less narcissistic as individuals – all attractive qualities in their own right. Our paper suggests that they may behave more ethically, too." ◻

'Do Good Times Breed Cheats? Prosperous Times Have Immediate and Lasting Implications for CEO Misconduct' is available at https://doi.org/10.1287/orsc.2016.1101

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THE ROLE OF LARGE **corporations** IN THE WAKE OF **disruptive events**

Why do multinationals donate so much to disaster-relief efforts? Are they motivated by altruism, or building reputational capital? Intriguing new research by **Catherine Magelssen** and **Luis Ballesteros** suggests something else is at play

The notion of "doing well by doing good", specifically regarding investments that address environmental, social and governance (ESG) issues, is axiomatic in the investment world. Profit motivation, it is argued, can dovetail neatly with responsible investment strategies.

New research suggests that this concept may have a broader application, relating to the role played by multinational enterprises (MNEs) in helping the economies and societies in which they operate to recover from systemic shocks such as epidemics, natural disasters and terrorist attacks.

Since the turn of this century, MNEs have been the fastest-growing source of such funding, ahead of governments, donor agencies and charities. While much academic work has focused on philanthropic activity by MNEs during periods of relative stability, helping to address long-standing problems such as high levels of poverty and low levels of healthcare and educational provision, less attention has been paid to MNE involvement in helping recovery from severe, system-wide and unpredictable shocks, and research in this area has tended to ascribe the same motives in the wake of such shocks as those ascribed during periods of stability. These include altruism, the attempt to accumulate reputational capital, hedging against political risk, and political pressure.

Our research points to a very different motive; one that, until now, has not been studied. Put simply, the philanthropy of MNEs in such circumstances is motivated by the basic need to restore working order to the market. Without a functioning market, businesses cannot operate.

Commercial threat

The types of shock we study pose a severe threat to MNEs' commercial activities: the destruction of infrastructure prevents transporting inputs such as fuel and raw materials to manufacturing plants and the movement of goods to market; impaired purchasing power reduces business and consumer demand for those goods; severe damage to housing, schooling and healthcare reduces workforce productivity; suspension of legal, regulatory and law-enforcement systems hurts MNEs; and disruption to financial intermediaries can lead to the cancellation of investments.

Taking all this into account, the clear interest of MNEs is to use their financial strength to restore affected markets in order to get back to business as usual as soon as possible.

To assess whether the economic importance of the country to the firm affects its motivation for donating in the aftermath of large, disruptive shocks, we selected the 2,000 largest public MNEs. These have headquarters in 63 countries. We then put together a global database of disaster response, covering financial and other donations from MNEs, governments, international agencies and non-governmental organisations, to all such events from 1990 to 2019.

Next, we analysed MNEs' contributions in the aftermath of 265 disruptive shocks affecting 129 countries. The analysis showed that the economic importance of a country to an MNE is directly linked to the scale of its response. This evidence survived our inclusion in the analysis of the standard alternative explanations of motive, including altruism, government pressure, poverty aversion and employees' philanthropic intentions.

What this means is that the larger the economic importance of a country to an MNE in terms of the extent to which it sells, buys or rents items such as fuel, raw materials, final products and services, and the extent to which it employs people in that country, the greater the adverse impact of disruptive shocks to the firm's performance.

And the greater this impact, the greater the incentive for the firm to use its resources to help the affected market to recover. By measuring the relative economic importance of a country to MNEs, we can identify which firms are likely to make donations in the event of market disruption.

However, such "philanthropic" giving, and its relationship to the importance of the country in question to a particular MNE, is not always straightforward. We interviewed decision-makers from companies in the S&P 500 index. To take one example, we learned that the link between country importance and MNE giving could be modified by the availability of other sources of funding, including insurance payments, aid from foreign countries and spending by the government of the country in question.

Furthermore, if a country had a recent history of substantial public spending or had been the beneficiary of significant foreign aid, or both, it fostered the expectation among MNEs that public-sector sources would fund the recovery; thus leading to smaller donations from MNEs, despite the country's importance to their operations.

Regulatory factor

A second factor is low regulatory quality, leading to bureaucratic delays and the misallocation of resources, disincentivising MNEs from generous philanthropic activity. Our findings indicated that MNEs donated comparatively large amounts to country markets with high regulatory quality, contradicting the conventional view that the incentives for giving rise in situations of institutional underdevelopment.

The increased likelihood of larger donations also applied when markets were dominated by the MNE in question. This contradicts the existing academic theory that philanthropic giving rises in competitive markets as firms strive to differentiate themselves through pro-social behaviour.

It is essential that such disruptive events, wherever they occur, are not confused with the permanent absence in some emerging economies of market-based institutions. Four factors distinguish disruptive shocks from other institutional contexts.
The first is the temporary nature of the shock. While priority is appropriately given to restoring education, housing and healthcare facilities, transport infrastructure can take years to restore.

'The findings indicate that disruptions give rise to a scenario where the motivations of MNEs and society at large are more aligned'

The second distinguishing factor is the sudden and unexpected nature of disruptive shocks. They are highly unpredictable and feature rapid falls in the functioning or availability of the factors needed for market functioning. Firms interested in entering new locations can scrutinise country risk. This, however, is a poor measure of the likely resilience of an economy to disruption.

A third difference is in the severity of disruptive shocks. Disruptions involve significant economic destruction in the affected countries. For instance, the US Federal Emergency Management Agency indicates that 40% of businesses do not reopen after a natural disaster, while 90% will become insolvent within a year if they do not reopen within a week.

The provision of goods and services can also be severely interrupted. For example, earthquakes in Chile and Japan in 2010 and 2011 respectively destroyed 32% and 17% of the goods supply for at least two months.

Strategic motive

To end where we began, the type of MNE philanthropy that we identify is an example of doing well by doing good. We introduce a strategic motive for the philanthropy of market restoration whose benefits approximate a public good – companies and society at large benefit from MNE contributions to restore the market. MNEs provide considerable public benefit for civil society, from schools to highways, hospitals and ports, when they contribute, albeit in the interest of returning to business as usual.

Given its public nature, this type of philanthropy is more susceptible to collective-action issues. For instance, some companies will free ride on the contribution of others and still benefit from the outcome. Consequently, a measure of economic importance facilitates identifying the pool of firms that are likely to become substantial contributors to the recovery of the country market.

Moreover, the findings indicate that disruptions give rise to a scenario where the motivations of MNEs and those of society at large are more closely aligned. Large, monopolistic MNEs are particularly important contributors to market recovery and function as a backstop when disruptions overwhelm the financial capacity of governments. □

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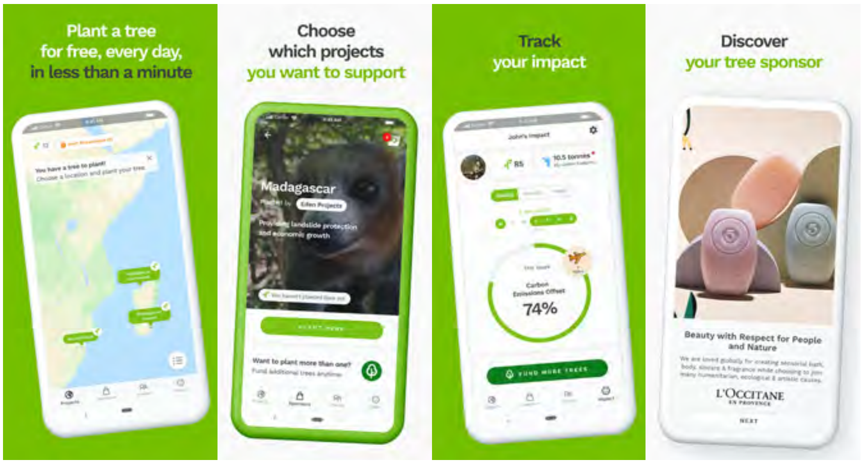
Treeapp: plant a tree for free, every day

Ioannis Ioannou and Nick Mickshik reveal how three LBS alumni devised a business that helps consumers fight climate change simply by viewing an ad on a mobile phone

In the spring and summer of 2018, Europe experienced a period of unusually hot weather that led to record-breaking temperatures and wildfires in many parts of the northern hemisphere. In Greece, the heatwave combined with strong winds to spark wildfires in the coastal areas of Attica. One of the deadliest wildfire events in the 21st century, the fires led to the deaths of 102 people and the destruction of thousands of homes and other property. Researchers at the Royal Netherlands Meteorological Institute and World Weather Attribution estimated that global warming more than doubled the overall likelihood of the heat wave, and in some places made it up to five times more likely.

One huge wildfire took place right in front of the house of Athens resident Godefroy Harito MiM2018. People he knew lost loved ones and the anger he felt impelled him to try to combat the effects of climate change. The same year, Harito met Jules Buker MiM2018 at London Business School. Like Harito, Buker also had a strong personal interest in fighting climate change. Of



Root cause: The planting projects, such as those in Tanzania (top left), Ethiopia (left) and Mozambique (right) create positive social impact through employment

French and Turkish descent, he was very mindful of Turkey's 2019 attempt at mass tree-planting when, on a day that the government declared 'National Forestation Day', volunteers planted 11 million trees in more than 2,000 sites across the country. Regrettably, within a few months of planting, an estimated 90% of the saplings were forecast to die due to lack of water.

Harito was a serial entrepreneur; Buker had previously founded businesses in the services sector and the legal-tech space.

Their LBS classmate Leo Ng MiM2018, who had acquired extensive product and software engineering expertise in his previous role at Google, shared their ambition to build a purpose-led venture.

Together, the three resolved to found a business that would both combat climate change and have a positive social impact. (The story of how the founders launched the business is the subject of the new LBS case study 'Treeapp: Plant a tree for free, every day'.)

WORDS: NICK MICKSHIK

What sector?

Given the rapidly growing global appetite in both public and private sectors for reforestation/afforestation and its potential for climate-change solutions at scale, combined with the environmental and social benefits it has the potential to provide, tree-planting appeared to be the sector most likely to fulfil the founders' dual aims, as Buker recalls: "We came to the conclusion that planting a tree is quite concrete – everyone knows what a tree looks like. It's also one of the only ways you can have an environmental impact and a social and economic impact with your activity. It's often forgotten when we talk about tree planting that it's not just about carbon-capture – it's also about the fact that local flora and fauna are restored and the positive economic impact it has on local economies. This was a huge factor in our choices."

'We came to the conclusion that planting a tree is quite concrete – everyone knows what a tree looks like'

What business?

In his seminal 2015 book 'What We Think About When We Try Not To Think About Global Warming', Norwegian economist, behavioural psychologist and Green Party politician Per Espen Stoknes identified a central problem in getting consumers to combat climate change: the more that people are confronted with facts about global warming, the greater their resistance to the facts grows; a syndrome Stoknes termed "apocalypse fatigue". This can lead to the paradox that greater awareness of the issue can actually make it harder to encourage the consumer actions ›

necessary to combat climate change. As Stoknes subsequently observed (in a 2019 podcast): "Most people have recognised ... that global warming is happening. The problem is making it relevant to our everyday actions so that it feels near, personal and urgent. So, it's not really an issue of understanding on the cognitive level – it's more an emotional and behavioural level that we need to address."

Mindful of the need to address the problem at the emotional and behavioural level, the founders realised their solution needed to be simple and enjoyable to use to attract sufficient user numbers; a free-to-use mobile app met all of those criteria.

Creating a habit

Observing that the passion among consumers to act was there, but that they lacked the time, money and know-how to make a difference, the founders decided to create a platform that enables the marketing of eco-conscious brands to fund tree-planting projects around the world. Harito says: "We wanted to create a habit for users, so that every day you could create an impact and you did not have to go on a browser to do it – you could just wake up, go on your phone, and have an instant impact by tree-planting, while having a great user experience."

Another key factor in designing the app, says Harito, was the lifestyle of their target demographic (millennials and Gen Z consumers): "We knew that it should be something that is on the move – that, wherever you are, you can simply open your app, do what you have to do, then just get on with your life. This was always the goal – having something that is simple, easy and free to do for anyone to have an impact."

Treeapp was launched in the UK and Ireland on 22 April 2020 to coincide with Earth Day, and met with immediate acclaim. The app generated more than 1,000 downloads in the first two weeks after launch and, as of February 2021, had acquired more than 30,000 users – purely through organic user acquisition – and more than 100 brand partners. The app enables anyone with a mobile phone to plant a tree for free, in under a minute, simply by watching three short ads or messages from one of Treeapp's branding partners. The brand partner gives £1 to Treeapp, who then arranges planting the tree in its user-chosen site.

App users have the option to fund additional planting voluntarily, and can calculate their carbon footprint via a personal dashboard showing them on which days they have planted trees and how the planting has offset their weekly, monthly and annual carbon footprint.

The business model

The Treeapp platform exploits 'network effects' (in this case, the indirect network effects characteristic of an online platform), whereby every additional app user generates more value to the platform because the available target audience for the brands grows, with the brands paying for the opportunity to market to a self-selecting and highly curated audience.

Similarly, the greater the number of eco-products available to users, and the greater the number of trees planted, the greater the utility of the app to them. Free to users in financial terms, they 'pay' by donating time to watch the ads.

Working with brands also gives Treeapp access to the brands' networks – the more brands it works with, the more exposure it gets, and the more exposure it gets, the greater the number of brands that want to work with it.

> 'We knew it should be something on the move – you can simply open your app, do what you have to do, then just get on with your life'

The rush to plant

At its annual meeting in Davos in January 2020, the World Economic Forum (WEF) launched the 'One trillion trees initiative' (1t.org) to mobilise commitments from corporations, governments and NGOs to "conserve, restore, or grow" one trillion trees by 2030 to restore biodiversity and help fight climate change.

One effect the announcement had was to inspire fresh efforts by entrepreneurs to develop products aimed at consumers to encourage tree-planting, and there are now many apps and platforms on the market that do so, either in return for direct product purchase or as a 'reward' for consumer activity. The range spans free websites, such as Ecosia, to games such as Ant Forest (a game that has become China's largest private-sector tree-planting scheme.)

There is a great deal of evidence around that suggests consumers are increasingly 'voting with their wallets' in choosing sustainable brands, but while the growing

No compromise: All planting partners have to satisfy Treeapp's strict ESG criteria. They include projects in (clockwise from top left) Tanzania, Peru, Haiti and Burundi

consumer appetite to combat climate change is a positive development, what sometimes appears to be a headlong rush to capitalise on it by business is not always so positive. Many apps and platforms reward consumer behaviour by sponsoring tree-planting, but may not themselves have business models that are based on circular-economy sustainability. For example, a free-to-use search engine may be effective in channelling ad income from searches into tree-planting activity, but may not discern between ads for eco-conscious products and those that are not (hence it does not discourage the purchase of 'non-green' products).

The planting side of the equation is also highly problematic: history is littered with afforestation and reforestation projects that have failed spectacularly, sometimes over the very long term. For example, China's massive 'Great Green Wall' programme, launched in 1978, was intended to grow 35 million hectares of new trees by 2050 to combat desertification. Over the next four decades the adage "Any tree is a good tree" became axiomatic in both private and public sectors in China – but unfortunately, the fast-growing poplars that could withstand north China's cold, dry winters were less able to withstand the rapacious attentions of the Asian longhorn beetle, whose numbers subsequently exploded. As a result, the poplars started dying off in vast numbers in the 1990s.

Well aware of these twin pitfalls, Treeapp only works with brand and local planting partners that satisfy strict ESG criteria. Brands typically have to have some form of nationally or internationally recognised validation, such as B Corp Certification; while planting partners are also very carefully vetted by academic experts in tropical forestry, who ensure the company is sponsoring the planting of the right species, in the right places, at the right time of the year. Buker says: "It's very easy to throw a seed into the ground and just forget about it. We believe this is wrong. A tree must be cared for, long after it has been planted."

The challenges ahead

The refusal to compromise on the basic principles of sustainability and the circular economy have helped set Treeapp apart from many other products on the market and helped propel its successful launch – but great challenges lie ahead.

To date, it has planted 600,000 trees in total. The founders now need to grow the business globally to deliver environmental and social impact at scale. To do so, they have set themselves the 'stretch' target of planting a million trees every day. Achieving that target in a sustainable way is a huge ambition.

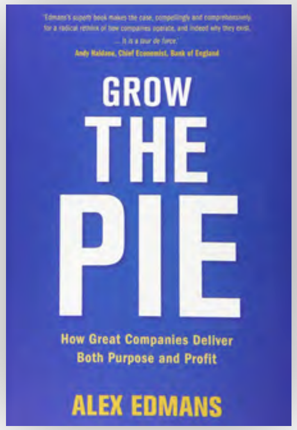
But, as Harito says, it's about helping everyone to help make the world a better place: "We set out on this journey to enable anyone to plant a tree and have an impact in making our planet just a bit greener and contribute to global reforestation. We just want to improve the world we live in, and the one we leave for future generations." ◻

The LBS case study 'Treeapp: Plant a tree for free, every day' is available at https://publishing.london.edu/cases/treeapp-plant-a-tree-for-free-every-day

Ioannis Ioannou is Associate Professor of Strategy and Entrepreneurship at London Business School

Recommended reads on sustainability

Researchers, staff and faculty at the Wheeler Institute for Business and Development recommend titles that can inspire us all to adopt planet-positive behaviours



Grow the Pie: How Great Companies Deliver Both Purpose and Profit | Alex Edmans

Recommended by Darcy Pu, PhD Student in Finance

One of the most insightful and thought-provoking books on ESG, *Grow the Pie* envisions a new approach in which people work together to share a bigger pie, rather than fighting each other to split a tiny pie.

The book also contains insightful critical-thinking lectures. To take one example, Professor Edmans argues that we should carefully examine why companies should focus on shareholder value under certain assumptions, before providing evidence that looking after stakeholder welfare can eventually add to shareholder value.

I recommend this book wholeheartedly to ESG advocates and ESG opponents alike – there are significant takeaways for both.

The Spirit of Green: The Economics of Collisions and Contagions in a Crowded World | William D. Nordhaus

Recommended by Diego Känzig, PhD Student in Economics

Nobel Prize-winning economist Nordhaus describes a new way of green thinking to help overcome some of the world's biggest challenges. In a lucid and accessible way, he explains key concepts such as collisions, contagions and externalities, and outlines how rethinking economic efficiency, sustainability, finance and corporate social responsibility could improve the effectiveness of our economy and reduce economic inequality.

The Flightless Traveller: 50 Modern Adventures by Land, River and Sea | Emma Gregg

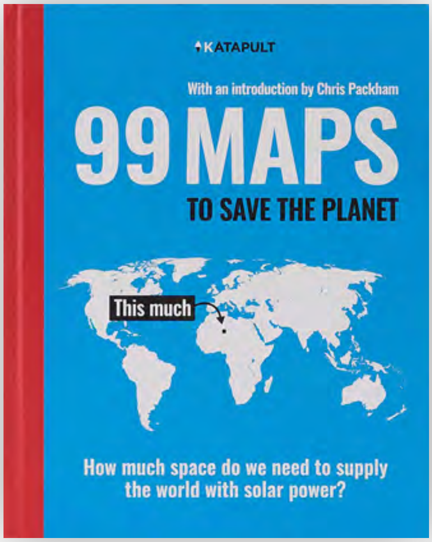
Recommended by Julian Marenz, Pre-Doctoral Researcher

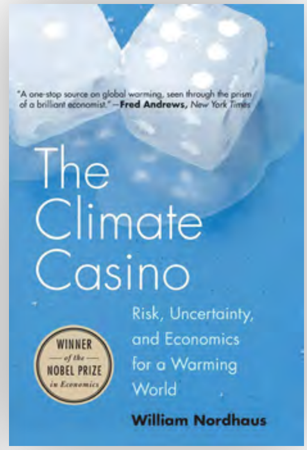
For many of us, travelling is an integral part of what we enjoy about life. Equally, many of us want to reduce our carbon footprint and live more sustainably. In this book, Emma Gregg provides a guide to exploring the world in a way that is more wary of the impact that our journeys can have on the planet. With instructions on how to reach 50 destinations, near and far, via land, river and sea, it's a great inspiration if you're looking for a holiday to take it slow. With science clear about the gravity of the climate crisis, it's up to all of us to change our behaviour. But, as this book shows, it doesn't mean we have to forgo the things we take pleasure in.

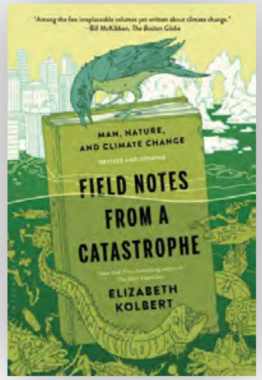
The Wizard and the Prophet | Charles Mann

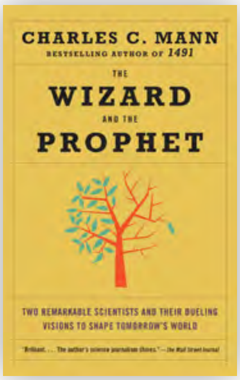
Recommended by Amelia Whitelaw, Executive Director

Mann draws on the opposing viewpoints of two 20th-century scientists and visionaries, Norman Borlaug and William Vogt, to address one of the most fundamental questions of our time: How will 10 billion humans live sustainably on Earth? Vogt, who is considered a founding environmentalist, believed prosperity could lead humanity to ruin; while Borlaug's research was largely responsible for the shift to producing high-yield crops that saved many millions from starvation. Mann navigates the reader between the opposing views of the techno-optimist and the environmentalist in a very balanced manner. I also found the historical perspective that provides the context to how we have got to this point very illuminating.









The Third Pillar
| Raghuram Rajan

Recommended by Mithilesh Shah, Pre-Doctoral Researcher

The response of our society to the global pandemic reminds me of this important book by Professor Raghuram Rajan, one of the most influential thinkers of our time. *The Third Pillar* illustrates how the state and markets have left behind the communities that are an important pillar of an inclusive society. It advocates a framework in which all three pillars balance each other and help everyone prosper. This is an appropriate time to revisit Rajan's ideas as we attempt to build back our society.

99 Maps to Save the Planet
| KATAPULT

Recommended by Tiago Ivo Martinho, Outreach Director

Did you know that just 67 companies worldwide are responsible for 67% of global greenhouse emissions? My love for maps and this question made me buy this book recently – it's a great example of how maps and infographics can communicate powerful messages. Based on scientific research and smartly selected data, it provides shocking images of our damage to our planet. Easy to read but hard to digest, I highly recommend it as a complement to the longer reads suggested here.

Field Notes from a Catastrophe: Man, Nature, and Climate Change
| Elizabeth Kolbert

Recommended by Till JF Trojer, anthropologist and filmmaker; Post-Doctoral Researcher

The author takes us with her on a journey to several locations as she speaks to communities directly affected by climate change. She speaks to farmers in Puerto Rico and engages with Inuit groups in the Banks Islands in the Arctic Circle, whose entire way of life is threatened by the devastating consequences of climate change. Kolbert merges these personal stories with experts' interviews and scientific discourse. Even after 16 years since its original publication, this remains an essential read on the impact of global warming. The personal stories deeply resonated with me and made me think (again) how we should all reflect on our ecological footprint and what we can do to stop climate change. In the age of the Anthropocene, it starts with us. The consequences of our inaction will define the lives of future generations.

The Climate Casino: Risk, Uncertainty, and Economics for a Warming World
| William Nordhaus

Recommended by Varun Sharma, PhD Student in Finance

Scientists have warned us that climate change is one of the most significant challenges humanity faces in the foreseeable future. Moreover, mounting evidence suggests that climate change poses a significant risk to capital markets and investments worldwide. In this thought-provoking and insightful book, Professor William Nordhaus, winner of the 2018 Nobel Prize in Economics, explains the interlinkages between science, economics and the politics of climate change. In particular, he highlights the trade-off between the costs that need to be incurred for abatement measures and the damages that can be avoided. In addition, he elaborates an overarching approach to reduce the risks of global warming. Finally, he illustrates convincingly why free markets alone cannot address the problem and emphasises the critical role of national governments and international bodies in addressing the issue. ◻

Engineer for change

Why **Asal Ibrahim** EMBADS2022 chose a career in renewable energy systems

People like to say renewable energy is now our only choice. The truth is, it's always been our only choice. The situation has simply become increasingly urgent. But the technology is there. I wish more people understood that a lot of the tech needed for greener energy is already very mature and is being used successfully. The industry is constantly expanding and evolving, and the more appetite there is, the faster we can continue to grow.

I grew up going back and forth between Saudi Arabia, where I was born, and Jordan. I got to experience many different people and cultures. It was a really good experience for me; it helped me to adapt to different environments and new situations.

I never thought I'd be an engineer. When I left high school I hoped to become an architect. Unfortunately, I wasn't the only one – architectural courses were in high demand and the entry requirements were too strict, so I signed up for electrical engineering. I thought I could do a year and then transfer to another programme.

It didn't take long for me to fall in love with engineering. I found the work fascinating. I knew I could contribute something new. The funny thing is, I did end up attending some architecture classes and I didn't enjoy them at all – they were nothing like I'd imagined.

I then worked for a big oil and gas company. I knew I wanted to work with renewable energy, but at the time those organisations were only looking to fill very senior roles. I had previously taken some electives in solar and other renewables, but I knew I needed to specialise if I wanted to move into that field.

My masters focused on renewable energy and sustainable development. I could work while I studied, which was intense but amazing. It meant I could apply everything I was learning straight away and give myself that practical edge.

Winning Germany's Ministry of Education Green Talents Award was incredible. Leaving my job in gas and oil was scary, but being recognised for my research proved it was worth the risk. I'd been researching and developing a technology that concentrates solar power using lenses. The award meant I was able to finish writing my thesis at the Fraunhofer Institutes in Germany.

In 2017 I joined [assurance and risk management company] DNV. I've just been promoted, so now I'll be leading on innovation and growth across Africa, the Middle East, Southern Europe and Latin America. Looking at my career so far, I think the most important lesson is to figure out what you really want to do – don't ignore those impulses. Leaving a role is always challenging, but you need to be willing to take risks if you want to keep moving forward.

I thought an MBA at London Business School would be intense, but you never really know what something's going to be like until you're in the middle of it. It's such a steep learning curve – I think that's what makes it so transformational. I know I'll be leaving LBS with new ambitions, new friendships and a new perspective on who I am and what I bring to the table. I was initially quite reluctant to apply. It was the height of the pandemic and everything was so up in the air. What would the hybrid teaching look like? I'm halfway through the programme and very impressed with my experience so far and looking forward to my year of electives.

After a real journey to get here, I feel very lucky to be working in an industry I was always drawn to. I hope we can collectively arrive at a point where every country in the world, especially those with industrial economies, is investing in renewables. After all, why wouldn't they?

'A lot of the tech needed for greener energy is already very mature and is being used successfully'

WORDS: ROSIE PARRY PICTURE: JASON BLACKEYE ON UNSPLASH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