<u>Doing Well By Doing Good: How Business</u> <u>Can Tackle the Climate Emergency</u>

As the US analyst Tom Friedman says "Pessimists are usually right and optimists are usually wrong. But all the great changes have been accomplished by optimists."

So: full disclosure. I am an optimist. I think we can and will sort the climate emergency and build a better world. I also think we can all get richer by doing it.

My thesis today is that there's a right way and wrong way to tackle the climate emergency. Doing it the wrong way will be catastrophic. Doing it the right way will not just save the planet, it will also help business thrive and secure a more prosperous future for everyone.

The climate emergency is real

But let's start with the bad news. There really is a climate emergency. Evidence:

- The carbon and other greenhouses gases we are putting into the atmosphere means precisely as the science predicts that the planet is heating up. The 20 warmest years on record have been in the last 22 years. The past 4 years have been the warmest ever.
- Sea levels are rising: sea-ice is shrinking year on year and the world's glaciers are retreating: both effects are putting more water into the oceans, and warming water expands all of which is causing more sea level rise.
- Extreme weather events are becoming more common. We are seeing more and more violent floods, droughts, megafires and storms.

The risks are real

And the risks are real too. Unless we tackle the emergency, very bad things will happen.

There are six significant longer term climate-related risks for the UK. We face enhanced risks of: flooding and coastal erosion; to health, wellbeing and productivity; of water shortages for the public, agriculture, energy generation and industry; to natural capital; to food production; and of new and emerging pests and diseases.

The risks to business

The climate emergency also brings some obvious risks to businesses.

There are physical risks: threats to businesses' daily operations as the climate changes. Some of these risks are acute: more flooding incidents, for

example, will disrupt logistics, transport, communications, staff getting to and from work; and unless we take steps to mitigate those risks, those disruptions will happen more frequently and more severely. Some of the risks are chronic: a growing shortage of water over the next decade or two will affect energy generation, industry and the wider economy. Nor will it be great for the water companies: as the CEO of one big water company told me, "if I don't have any water, I don't have a business".

There are policy risks which could affect business: future governments may tighten regulation, introduce new carbon taxes, or cap the use of resources.

There are legal risks: we are seeing a steep increase in climate-related litigation. Businesses will not be immune.

There are technology risks: new low-carbon technologies will disrupt the economy and reduce the demand for existing products.

There are market risks: demand for existing products and services is dropping as consumers find 'green' products more attractive.

There are financial risks: investors are increasingly shying away from businesses which have not taken steps to adjust. Mark Carney, the Bank of England governor, has repeatedly warned that companies that are not moving towards zero-carbon emissions will be punished by investors.

There are reputational risks: companies which are not taking steps to reduce their own contribution to global warning will take a big hit.

And there's an existential risk: James Gorman, the CEO of Morgan Stanley, has said 'If we don't have a planet, we're not going to have a very good financial system.'

But it's also an opportunity

But here's the good news. It doesn't have to be like that. The climate emergency is the biggest challenge of our or any other generation. But we can tackle it successfully and come out with a better world.

Let's start with how not to do it. We can say there's no problem. We can say there's no hope. Or we can say there must be no more growth. All three of these approaches are wrong.

Simply declaring that there is no problem and therefore no need for action is a position that some prominent politicians — particularly overseas — have taken. However, what's noticeable about that is that a) politicians who deny climate change are increasingly being punished by the voters, so they are an increasingly endangered species b) whatever the politicians say, the businesses in their own countries do believe in climate change and are investing heavily to manage down the risks and c) the science is irrefutable. I'm going with the wisdom of crowds, the hard-headed business people and the scientists.

The second wrong way to respond to the climate emergency is the opposite of

the first. It's to declare that climate change does exist and has already had such severe consequences that we are almost inevitably heading for extinction: in short, that we are all doomed. The problem with this approach is that it isn't true but risks leading people to the conclusion that nothing can be done and so we shouldn't do anything. Despair is never the best way to motivate people, and some of the climate campaigners' more extreme rhetoric risks falling into this trap.

And the third wrong response is the one that says we have to choose between climate security or prosperity — that we can either save the planet or have continued growth, but we can't have both. You hear this from some journalists and academics — particularly western ones.

There are several things wrong with this.

First, it isn't true: with the right policies we can have both growth and tackle climate change successfully.

Secondly, it's the route to failure, because if you force people to choose between growth, jobs, prosperity and housing on the one hand, and action on climate on the other, most of them will choose growth.

And third, it's immoral, because taken to its logical conclusion it says that the West, which has had its growth and caused the climate emergency in the first place can keep its prosperity and way of life, but that the rest of the world — which didn't cause the climate emergency — cannot have the development which the West has had.

I learnt that as the UK's High Commissioner in India in the run up to the UN Climate Summit in Paris in 2015. India is as keen as anyone to tackle climate change: their Himalayan glaciers are melting, sea level rise is threatening to drown millions of people in the Sundarbans, and the farmers in Punjab are finding water increasingly scarce. But there was no way India was going to sacrifice its own future growth and development to help the West out of a problem we in the West created.

Conclusion: if people are going to buy into it, any viable solution to the emergency has to deliver both sustainable growth and stop dangerous climate change.

The right way: growth and a better planet

And we can indeed do both of those things together. Let me set out how.

Successfully tackling the climate emergency requires two things. It requires mitigation: we need to reduce the causes of climate change by reducing the emissions of the greenhouse gases that drive it. That requires us to reduce our carbon output, for example by obtaining more energy from renewable sources and to lock up more of the carbon we do produce so it doesn't get into the atmosphere.

And it requires adaptation: making changes to our lifestyle, places and economy to negate and prepare for the effects of a changing climate to reduce

the vulnerability of communities and ecosystems, for example by building higher sea defences; and making ourselves more resilient, for example by building infrastructure that can recover quickly after a flood, and houses that use less water and energy.

The good news is that while both mitigation and adaptation cost money, they are also opportunities to drive growth and innovation. We already know from the UK's own experience that it is possible to reduce greenhouse gas emissions and have growth: the UK has reduced emissions by 42% since 1990 while growing the economy by 72%.

The need to remove carbon from our economy is a golden incentive to invent alternative technologies that don't require it, which can mean more jobs, investment, growth and profit. Some technologies we already know about: hydrogen vehicles for example (the Environment Agency has two). Others haven't been invented yet, but they might be. Example: some serious scientists have suggested that we could install orbiting mirrors in space to reflect solar radiation away from the Earth and reduce global warming. That might sound like science fiction. So did the Moon landings when Kennedy announced them in 1961: eight years later they happened.

The Global Commission for Adaptation, headed by a pretty successful businessman you may have heard of (Bill Gates) has found that investing \$1.8 trillion from 2020 to 2030 in five specific areas (early warning systems, resilient infrastructure, improved crop production, mangrove protection and more resilient water supply) could generate \$7.1 trillion in total net benefits. In other words, failing to seize the economic benefits of climate adaptation would lose us trillions of dollars in potential growth and prosperity. So with the right investments we can do well by doing good.

There are also opportunities not just to save the planet but to create a better one. Example: place-making. We need our cities to be resilient to the effects of climate change. That's a great opportunity to reinvent our cities, with more blue and green spaces — more resilient, most sustainable, more beautiful, better for the health and wellbeing of all who live there. Doing so won't choke off the growth we all want to see: it will drive it.

What businesses can do

So there's commercial as well as social and environmental benefit in companies taking their own action on the climate emergency. More and more businesses are now actively doing so. They are considering the impact of climate change on their own business; assessing the risks and opportunities and the implications for their current and future business models; setting metrics and targets to address climate change effectively; bringing climate change onto their Board's agenda; and ensuring that climate change disclosures are made in their accounts and annual reports.

What the EA is doing

Tackling the climate emergency is also at the heart of what the Environment Agency does. We have traditionally focused on two things:

We play a key role in mitigation, helping to reduce greenhouse gas emissions by regulating most of the sectors which generate them: power stations, landfill sites, farms etc.

And we play a key role in adaptation, helping to increase the country's resilience by building flood defences, helping plan better cities and working with the water companies to ensure we have longer term water resilience. We are also seeking to up our climate game. Three examples:

- Governance: in my executive committee, every agenda item now comes with a standard question: how will this proposal help us tackle the climate emergency? That is helping focus our minds and our organisation on our biggest task.
- Advocacy: we are speaking out publicly on climate and seeking to encourage action from all.
- Leadership by example: we decided last autumn that we had to walk the walk ourselves.

The EA's Net Zero Commitment

That is why the Environment Agency has set itself the goal of becoming a net zero organisation by 2030. Our aim is that by then we will be taking as much carbon out of the atmosphere as we are putting into it, so that we are no longer contributing to climate change ourselves. We have adopted a tough, internationally recognised definition of net zero: not just the carbon we produce ourselves but also the carbon produced through our supply chain.

We aim to achieve this by reducing our carbon emissions by at least 45% by 2030, and addressing the effect of our remaining emissions through tree planting and other measures that will lock up carbon harmlessly and deliver multiple benefits like reduced flood risk.

Having taken this net zero decision we then decided to make it even harder for ourselves, by setting an even more audacious aspiration: to explore whether we can become, by 2050, an absolute zero organisation — one that does not produce any carbon at all. We know of no organisation that has set itself that target. There is probably a very good reason for that.

Just getting to net zero will be a huge challenge. The EA's current carbon footprint is 180,000 tonnes a year: 44,000t from our own activities, 136,000t from our supply chain. Our main emissions come from construction of flood defences, pumping water to alleviate flood and drought, travel and buildings. We'll need to reduce significantly all of these emissions to get to net zero, and remove them altogether if we want to reach absolute zero.

Success will require wholesale change across the organisation in how we do things. It will require hard choices: we may need to stop doing some things, or do them very differently. It will require innovation, because some of the technologies we'll need do not yet exist. It will require sustained focus on our goal, and ensuring that all our future decisions support it. What our decision doesn't mean is that we will stop building flood defences, pumping water out of people's homes if they flood or around the country to alleviate

drought, travelling, heating our buildings, using energy or all the other things we need to do to create a better place. It does mean we will need to find ways to do these things which produce less — and ultimately zero — carbon emissions.

This decision was quite counter-cultural for the Environment Agency. The EA is an evidence-based organisation that dislikes doing things unless it knows exactly how to do them and what the outcome will be. Setting a target that we don't know exactly how to reach is a leap of faith. It is also a huge vote of confidence in our staff's ability to innovate and think differently.

It has also had an unexpected effect: it has done more than any other single decision we have taken to energise our staff. They are brimming with ideas and energy about how we can get there. And that's another benefit of tackling the climate challenge: it will really energise your in-house talent, and bring you more.

Conclusion

One of the curious but encouraging aspects of the climate debate is that it has brought together unexpected allies. The activists of Extinction Rebellion, who were camped outside my office a few weeks ago, might appear to have little in common with the budding CEOs I met a few years ago at Harvard Business School. And yet.

The best slogan I saw on an Extinction Rebellion flag said: "the biggest threat to the planet is the belief that someone else will save it". Absolutely right.

There is another slogan that they drum into you at Harvard if you want to run a really successful business, and it's this: "The main thing is to make sure that the main thing really is the main thing". I suggest, ladies and gentlemen, that in today's world — whether you are an XR activist, a business executive, or just a citizen of this beautiful blue and green planet — the main thing is the climate emergency.

<u>Launch of the Nationally Determined</u> Contributions (NDC) Hub

Honourable Prime Minister, Josaia Vorege Bainimarama,

Deputy Director-General Dr Audrey Aumua,

Pacific Coordinator of GIZ James MacBeth,

Government representatives from Samoa, Solomon Islands, Tonga, Papua New

Guinea and Fiji,

Excellencies,

Ladies and Gentlemen — thank you for the warm welcome.

I am delighted that my first visit to the Pacific is to represent the UK as Commonwealth Envoy and to participate in the official opening of the Regional Pacific Nationally Determined Contribution Hub. Commonwealth and Climate Change

As we know all too well, the countries of the Pacific in the front line of the struggle against climate change. We have much to learn from one another and we must support each other.

The Commonwealth has been sounding the alarm on climate change as early as the Langkawi Declaration on the Environment in 1989. The overwhelming majority of Commonwealth member states continue, I am glad to say, to advocate for ambitious action on climate change today.

At the 2018 Commonwealth Heads of Government Meeting in London, Leaders reaffirmed their commitment to deliver the Paris Agreement and pursue efforts to limit the increase in global average temperatures to 1.5 degrees Celsius above pre-industrial levels. They also recognised the impact of climate change on the ocean, including sea level rise, ocean acidification, and coral bleaching.

This Commonwealth focus is in no small part down to the sustained advocacy of Pacific Island Countries — not least Fiji as the President of COP 23 in Bonn.

Regional Pacific NDC Hub

We should all be grateful for the role of the Government of Fiji in driving this important agenda and its sustained support for the establishment of this Regional Pacific Nationally Determined Contribution Hub. I also wish to acknowledge the efforts of all the donors, and regional organisations for all their support, and to SPC in particular for providing this fantastic home for the NDC Hub.

As we know, Nationally Determined Contributions are at the heart of the Paris Agreement and are vital to achieving its long-term goal of limiting global warming.

That is why the United Kingdom announced at the CHOGM in 2018 that it would support this initiative by contributing £1.2 million of funding.

It is great to see your strong support, Honourable Prime Minister, demonstrated by you officially and personally opening the Hub tonight.

We have already seen some of the progress The Hub has made, including the creation of NDC Roadmaps, investment plans and project pipelines in Tuvalu and Kiribati; a climate change education programme in Nauru; and the

establishment of a Monitoring, Reporting and Verification system in Solomon Islands, to name just a few.

Future Ambition

Without greater ambition the NDCs agreed in Paris in 2015 would only limit global warming to around 3 degrees. We know that this is not enough and that ambitious revised contributions can help to close that gap.

The United Kingdom is therefore pleased to be following in Fiji's footsteps by hosting COP 26 in partnership with Italy. We are determined to sustain our historic leadership on climate change, and to be committed, ambitious and effective hosts.

2020 now needs to be a year of climate ambition. It is great to hear of some of the ambitious targets coming from this region and it is crucial that every country comes forward in 2020 with ambitious new climate commitments, which will help us meet the goals of the 2015 Paris Agreement.

When it comes to the UK itself, we have actually cut emissions by 40% since 1990, which is the fastest rate of reduction in the G7 group of countries. You may have heard the announcement we made yesterday by our Prime Minister, bringing forward the deadline to 2035, after which time it will be illegal to sell petrol or diesel vehicles in the United Kingdom. And that ban is now extended to include hybrid vehicles as well. We have also doubled our commitment of climate finance, we have now committed £11.6bn over the coming five years.

CHOGM 2020

The next Commonwealth Heads of Government Meeting in Rwanda this June is a key milestone, maybe the key milestone, in a crucial year on climate change ahead of COP 26 and on biodiversity ahead of COP 15.

Rwanda has already proposed, and the rest of the Commonwealth membership has agreed, that environment, which includes climate change and the ocean, should be one of their five key themes for the summit. The great ocean states of the Pacific now have an integral role to play in developing ambitious climate commitments that create positive momentum ahead of COP — we look forward to announcements at CHOGM on revised NDCs or net zero Long Term Strategies.

I would like to urge all country representatives here this evening to draw on the technical expertise of this NDC hub, to take ambitious action to tackle climate change and to work with the UK and other Commonwealth member states on the path to the Rwanda CHOGM and to COP 26.

This Regional Hub contributes to a sustainable and resilient development pathway, and the transition to net-zero emissions in Pacific Nations, presenting a continuing opportunity for the Pacific to give a lead at COP26 Thank you all for attending this evening's launch event. In the months to come, we must move forward together to advance this common cause, which is nothing less than the future of the planet and the future of humanity.

UK Tech Rocketship Awards take off in Taiwan

On the look-out for successful Taiwanese technology scale-ups, the British Office in Taipei today announced its Tech Rocketship Awards in Taiwan.

The UK Tech Rocketship Awards are open to established Taiwanese scale-ups who offer innovative, technology-led solutions across a wide spectrum of technologies, have been trading for over 2 years and are looking to internationalise.

The 'Awards' will help 6 winners gain exposure, expand their global networks and expedite the set-up of their UK operations through a paid-for, curated trip to the UK during London Tech Week in June 2020.

So far, over 1,700 companies from Australia, India, Japan, New Zealand and South Korea have participated in the UK's Tech Rocketship programme, and this year the awards will be open to Taiwanese businesses for the first time.

Catherine Nettleton, British Representative in Taipei said:

"The UK tech eco-system is going from strength to strength, growing 2.6 times faster than the wider economy. It's the perfect place for determined and ambitious tech companies to grow globally.

We're already seeing a strong increase in the number of innovative technology companies taking advantage of what the UK has to offer through expansion, enjoying the lowest corporate tax rates in G20.

I'm particularly excited about our Tech Rocketship Awards taking place in Taiwan — they are an excellent platform for companies to grow internationally and I encourage all Taiwanese tech companies with global ambitions to submit an application."

The UK Tech Rocketship Awards categories in Taiwan are:

- Artificial Intelligence (AI) & Data
- Tech for an Ageing Society (Life Sciences)
- Future Mobility

The deadline for submission of applications is 13th April 2020. Full details about the competition, including terms and conditions are on the <u>UK Tech</u>
<u>Rocketship Awards</u> website. Winners will be announced in May 2020.

About the Awards, please see <u>UK Tech Rocketship Awards in Taiwan</u> website.

UK Tech Sector (Updated in January 2020)

- The number of rapidly growing UK tech companies soared as venture capital investment increased by 44% in 2019.
- It was a record-breaking year for the UK tech sector, as investments soared to £10.1bn (\$13.2 billion) in 2019.
- On a global scale, the UK's performance in 2019 means it now sits behind only the US and China in terms of total venture capital funding received in 2019 and on a city-level, London joins the Bay Area, Beijing and New York at the top of the world's most-funded locations.
- Almost half of the UK investments (£4.6bn) in 2019 came via US and Asian investors and the UK tech sector recently overtook the US for foreign investment per capita.
- While London remains the leading city for unicorns in the UK, having produced a total of 46 unicorns since 1990, Manchester, Oxford, Cambridge, Edinburgh and Bristol have produced a combined total of 20.
- Six UK cities rank amongst the top 26 cities in the world for raising venture capital in 2019, these are London (4th), Cambridge (12th), Bristol, Oxford, Manchester and Edinburgh.
- The UK's success in attracting venture capital investment in 2019 also fuelled, in part, a surge in the UK's best performing sectors fintech, AI and deep tech, and clean energy.

Please also see 2019 UK Tech Nation Report for more information.

- Investment for UK scaleup digital tech firms grew 61% between 2017 and 2018.
- 35% of Europe and Israel's 169 unicorn tech companies have been created in the UK.
- Scaleup tech investment was 2.5x higher than expected for size of the UK economy.
- Investment in AI grew almost 6 times from 2014 to 2018.

- Total venture capital investment in UK tech in 2018 was more than any other European country.
- The recent growth rate of London tech scaleups, makes it first worldwide for scaleup growth.
- With £5bn of scaleup investment, the UK ranks 4th in the world, after the US, China and India.
- Tech scaleup deals delivered the majority of all tech investments in the UK in 2018.

Bold new beginning for Global Britain

- Dominic Raab launches ambitious plan for Britain's new role in the world
- Four-country visit including Australia & Japan will promote ambitious free trade deals and Britain as a force for good

Global Britain will be a force for good and an energetic champion of free trade as it pursues closer ties with international partners and embarks on a new role in the world. Leaving the EU marks a step change in Britain's engagement on the world stage as a free-trading nation with a strong moral anchor.

Our ambitious plan to strengthen historic ties while broadening our horizons to embrace the opportunities in the rising economies of the future will be the theme of Foreign Secretary Dominic Raab's four-country visit to the Asia-Pacific region, taking in Australia, Japan, Singapore and Malaysia.

As the first major ministerial visit abroad following the UK's departure from the EU, the Foreign Secretary will set out the guiding the principles behind the Government's Global Britain campaign.

Ahead of his visit, Foreign Secretary Dominic Raab said:

Now is the time to put Global Britain into action. The Asia-Pacific region is full of opportunities and our message is that the UK is open for business and a great place to invest.

We will be an energetic champion of free trade to boost small businesses, cut the cost of living and create the jobs of the future.

And we will be a force for good in the world, leading on vital

global issues, like climate change.

The Foreign Secretary will begin his visit in Canberra tomorrow (Thursday, 6 February), where he will hold talks with his Australian counterpart Marise Payne.

He will then travel to Sydney on Friday (7 February) to meet business leaders and visit the New South Wales Rural Fire Service to show support for those involved in the recent bushfire response.

The Foreign Secretary will travel to Japan on Saturday (8 February) for meetings with Foreign Minister Toshimitsu Motegi and afternoon tea with Environment Minister Shinjiro Koizumi.

He will subsequently visit Singapore and Malaysia, where he will hold trade and bilateral talks with Foreign Ministers in each country.

ENDS

<u>Multi-million pound support package to</u> boost the FE workforce

Further education providers across the country are to benefit from a package of support, worth up to £24 million, so they can continue to recruit, retain and develop excellent teachers, Education Secretary Gavin Williamson has announced today (Wednesday 5th February).

The government is investing significantly to improve access to high-quality further education and training, as part of an additional £400 million boost for 16 to 19 education in 2020-21 and by introducing new T Level qualifications.

The multi-million pound investment announced today will support this drive by bolstering the FE workforce, helping to deliver the government's commitment to level up skills and opportunity across the country.

It includes:

- £11 million to provide bursaries and grants worth up to £26,000 to attract talented people to train to teach in FE, in priority subject areas such as STEM, English and SEND teaching.
- A £10 million boost to expand the government's successful <u>Taking</u>
 <u>Teaching Further programme</u>, <u>delivered in partnership with sector body</u>
 <u>the Education and Training Foundation (ETF)</u>, which sees industry
 professionals working in sectors such as engineering and computing to
 retrain as further education teachers. The scheme has already supported

over 100 people to work in FE across the country so far. This additional funding will support up to 550 more people to train to teach a range of technical subjects in 2020.

• £3 million for high-quality mentor training programmes, designed and delivered by the ETF to support FE teachers — including those in the important early years of their careers — to develop and progress.

Education Secretary Gavin Williamson said:

Our ambitions for a world-beating technical education system can only be achieved if we have outstanding teachers who will inspire the next generation.

I've seen first-hand just how much brilliant work is already going on up and down the country. I want to thank the many thousands of further education teachers doing fantastic jobs and changing lives.

This investment is a clear signal of the government's commitment to helping the FE sector to continue to recruit and retain excellent teachers who will help to unlock their students' full potential.

Kirsti Lord, Deputy Chief Executive of the Association of Colleges (AoC), said:

Supporting FE providers to recruit and retain the best possible teachers must be a top priority for a government with ambitious plans for improving technical education in this country. We are delighted with the new investment from the Department for Education in the sector's teaching workforce which our members will welcome — and we believe it marks an important step in giving FE teaching the recognition and support that it rightly deserves.

James Noble-Rogers, Executive Director of the Universities' Council for the Education of Teachers (UCET), said:

Teacher training providers will welcome this new investment in training high-quality teachers for the further education sector. The decision to extend the availability of pre-service training bursaries to a wider group of potential applicants in more subject areas is particularly welcome, and will help to ensure that more individuals can access high-quality teacher training programmes.

The Taking Teaching Further programme was launched in 2018 to support further education providers to attract talented industry professionals to retrain as further education teachers so they can pass on their knowledge and expertise and help give more people the chance to secure a rewarding career.

David Russell, Chief Executive of the Education and Training Foundation, said:

The Education and Training Foundation is delighted to continue the important work of attracting the very best industry talent into Further Education (FE) teaching roles through Taking Teaching Further. This announcement continues the Government's vital investment and support for FE workforce development.

Taking Teaching Further is setting the standard for recruiting world-class teachers and trainers, who combine teaching excellence with hands-on industry experience, and is helping develop and build the country's future. I encourage all Colleges and FE providers to register and apply to take part in this important programme that will make a real difference to their organisations and learners.

Shaun McDonagh — Lecturer in Plumbing, EKC Group Broadstairs College:

Taking Teaching Further has provided me with an excellent chance to be fully supported in making the change from industry to FE teaching. The extra time to learn, prepare and gain essential skills during my first year of teaching since leaving the plumbing trade to become a lecturer has been invaluable

The government has also today confirmed that it will introduce <u>plans to</u> <u>collect data on the FE workforce every year, starting in the next academic year</u>. The move follows a consultation with the FE sector last year. The annual data collection will make sure the government has robust information on the FE workforce to enable a greater understanding of who makes up the FE sector.