## Speech: I don't want you to panic

Emma Howard Boyd, Chair of the Environment Agency

Climate Action Society, University College London, Wednesday 20 February 2019

Good evening.

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"I want you to panic."

This simple message came from 16-year-old climate activist Greta Thunberg.

It caught the world's attention.

It ignited Friday's schools climate strike.

And — in a world where people talk about climate change all the time in unthreatening generalities — it brilliantly communicated the fact that climate change is an immediate problem.

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We need activists like Greta Thunberg to push climate change up the agenda.

And, to challenge people in positions of power - (like me) - to work harder, and do better, because...

Last year — the Intergovernmental Panel on Climate Change said we have 12 years to limit global temperature rise to 1.5°C above pre-industrial levels. Otherwise adapting to hotter days, fiercer fires, storms, and rising seas, will get radically more difficult.

Last month — the World Economic Forum's Global Risks Report ranked extreme weather events first, and the failure of climate change mitigation and adaptation second, on its table of global risks by likelihood.

Last week — the Institute for Public Policy Research released a report saying that since 1950, the number of floods across the world has increased 15 times, extreme temperature events 20 times, and wildfires seven-fold.

But... as members of the Climate Action Society, I am going to assume that you already know all of that.

Instead, I'm going to talk about what climate change could mean for you in the next stage of your career.

Whether you go to work in private business, public service, academia, the media, or a great green NGO like Greenpeace, WWF, or Friends of the Earth... every organisation will be touched (in one way or another) by climate change.

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At the Environment Agency, one of our roles is as a Category 1 emergency responder during flood incidents.

In December 2015, I was in France taking part in the negotiations for the Paris Agreement.

At the same time, the Environment Agency was responding to some of the worst flooding England had ever seen.

On December 5, 341.4 millimetres of rain fell in 24 hours at Honister Pass in the Lake District — a record.

The flooding of northern towns and villages did not let up until February.

The strain such events puts on individuals, families, and communities, stays long after the flood water has receded.

The emotional distress remains throughout the recovery, when every rain cloud brings fresh fear.

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In those urgent situations — (which we know are set to become more severe because of climate change) — it is vital that my colleagues don't panic.

They need to act calmly and professionally to help people get through the immediate impacts, and return to normal as quickly as possible.

If that sounds like something you'd be interested in, then I'd love you to consider working for the Environment Agency.

But, there are many other less obvious organisations that need people like you…

People who understand the urgency of acting on climate change, and have knowledge, skills, and enthusiasm to bring to that work.

When we talk about tackling climate change the emphasis is usually on reducing emissions.

This is with good reason: the world is not doing enough.

But, sadly, because of the increasing physical impacts that are now part of all future climate scenarios, we also need to increase our efforts to prepare for them.

Adaptation is not a competing agenda to reducing emissions, the two things go together.

It doesn't make sense to build an energy efficient house that could be washed away in a flood.

Globally, climate resilience measures are predominantly provided by the public sector, but cross-sector collaboration is key.

According to the Institution of Civil Engineers, over 45% of National Infrastructure and Construction up to 2020/21 will be financed through the private sector.

As people's routines are disrupted by natural forces — shareholders, workers, and customers will increasingly demand that brands help their lives run smoothly.

At the World Economic Forum in January, David Attenborough told the old joke:

"Anyone who thinks you can have infinite growth on a finite planet is either a madman or an economist."

But, he wasn't only there to criticise business and Government leaders.

He was trying to convince them to use their power to improve the way their organisations operate.

As students at a top university, soon to embark on your careers — you can help those organisations to improve the sustainability and resilience of their business models.

They need you.

It's not easy to run a successful business on any scale.

During a routine farm inspection recently, a farmer told a colleague of mine:

"It's hard to go green when you're in the red."

The Environment Agency's job — as a regulator — is to help that farmer to do better.

But, that doesn't mean going soft on pollution incidents or environmental crime.

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I became Chair of the Environment Agency after 25 years working in finance.

I was in the City during the 2008 financial crash, and that strengthened my belief in the need for strong regulation.

I don't want to let the kind of regulatory failures that happened in finance, happen in the natural world.

You can't bail out nature like you can bail out a bank.

One of the difficulties with convincing businesses of the need to take action on climate change has traditionally been that some see it as a drain on resources rather than a money-spinner.

This is changing in some areas...

For instance, the Climate Change Act helped to reduce the UK's greenhouse gas emissions to 43% below 1990 levels by 2017.

And, the UK economy grew by two thirds during the same period.

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Unfortunately, the economic benefits of preparing for the impacts of climate change are less well understood.

Businesses have a lot to gain from realising the long-term opportunities in adaptation.

Mark Carney, the Governor of the Bank of England has said: "Financing the transition to a low carbon economy is a major opportunity for investors and creditors. It implies a sweeping technological revolution, including investments in long-term infrastructure at roughly quadruple the current rate."

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Much of that technology already exists. Including "green" infrastructure — like natural flood management and soil improvement.

For New York City, watershed management has saved \$5bn in capital costs and \$300m annually.

On the border of Brazil and Paraguay, returns on investment in soil conservation have significantly extended the life expectancy of the Itaipu Dam, paving the way for greater energy security.

In China, improved land management and watershed restoration on the Loess Plateau has eliminated the need for drought-related emergency food aid to a region that is home to 50m people.

Restoring mangroves in Vietnam has enhanced sea defences and improved the livelihoods of people using local resources.

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These are all good individual projects, but we also need to be flexible in our general approach.

Adaptation pathways enable us to respond to the latest science, economics and environmental changes as our understanding improves.

The Thames Estuary 2100 project — which looks at protecting London beyond the life of the current Thames Barrier — is an example of this.

Don't prepare for the previous record storm, build back better for the next one.

Governments and businesses need to cooperate internationally.

As the impacts get more severe, we have so much to learn from countries who already deal with large scale natural disasters.

In Bangladesh, deaths from tropical cyclones declined more than 100-fold in 40 years, from 500,000 deaths in 1970 to just over 4,000 in 2007.

This was achieved by developments in early warning systems, cyclone shelters, evacuation plans, coastal embankments, reforestation schemes, increased awareness and communication.

I am working to increase international partnership on this as UK Commissioner to the Global Commission on Adaptation.

The GCA will be publishing its first report at the UN Climate Summit in September.

At the Environment Agency, international partnership is necessary to ensure our work in England is world class.

We are part of I-STORM — the International Network of Storm Surge Barriers — which brings together professionals from the USA, The Netherlands, and beyond, to review each other's work, and improve standards of flood protection all over the world.

Our collaboration with the Bureau of Meteorology in Australia, helps us stay on the cutting edge of flood forecasting and warning.

We are driving up standards in waste regulation and plastics reduction as part of the European Environment Protection Agencies network.

And, the Environment Agency Pension Fund is showing that you can put in a strong financial performance and influence companies to reduce their carbon emissions.

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Right now, the details of the UK's future relationship with the European Union are still not known.

Whatever the outcome, international cooperation and progress towards targets like the Paris Agreement, and the UN's Sustainable Development Goals, continue to be essential.

We are working to guarantee this whatever happens.

For instance, last week the Government launched a new system to ensure the UK maintains current restrictions on the use of fluorinated greenhouse gases in the event of a no deal Brexit.

The business world needs more people to make the case for investment in climate measures and natural capital from the inside.

The environment is not universally well represented in boardrooms.

Company boards have to take environmental risk seriously and not see it as an operational expense.

This goes for managing their own impacts like pollution incidents, but they should also put aside funds to ensure business continuity in severe weather.

If the centre of town is cut off by a flood, then people will take their business elsewhere. Meaning that an entire community, and all those who rely on it, suffer.

However, if businesses were to collaborate to make areas more resilient, they could drive down costs, and ensure whole districts are able to get back to normal quickly after the storms have passed.

Finance provides another way to help companies realise this.

A few years ago, the Environment Agency Pension Fund set up the Transition Pathway Initiative with the Church of England National Investing Bodies.

The TPI, which is run out of the Grantham Institute at the London School of Economics, assesses how companies are preparing for the transition to a low-carbon economy.

It is now supported by asset owners and managers with over £8.17 trillion of assets under management.

We use the results of the TPI's analysis to inform investment decision-making and our engagement with companies.

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On adaptation specifically — if you could show people how much certain property protections are worth to their business in hard numbers before a future storm, you could use this as a clear way of demonstrating the value of climate measures.

If strong locks on your doors keep insurance premiums down, then resilience measures such as water resistant insulation in walls and under the floor should do the same for flooding.

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The good news for you is that one of the best places in the world to begin looking for employment in green business is here in London.

The international operations of the City, the existing expertise and demand for sustainable investments — and the fact that the London insurance market is already a world leader in natural hazard protection — makes it a leading green financial centre.

And, that's a great springboard from which to leap into all kinds of new

environmental projects.

To conclude.

David Attenborough's main message at Davos was:

"The Garden of Eden is no more... We need to move beyond guilt or blame, and get on with the practical tasks at hand."

As you leave UCL and go on to do whatever comes next, I want you to remember that every sector of society has a role to play in those practical tasks.

You can be the change you want to see in business, government, NGOs, academia, the media, or wherever you go next.

As members of the Climate Action Society, I know you appreciate the urgency of our climate change crisis, so...

I don't want you to panic.

Because we need to go to work.

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Thank you very much.