Speech: Steady investments in a changing climate

Emma Howard Boyd, UK Commissioner to the Global Commission on Adaptation and Chair of the Environment Agency speech at the European Bank for Reconstruction and Development

London, 21 March 2019

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Where we invest matters.

Last year, the Intergovernmental Panel on Climate Change said we have 12 years to hold global warming to 1.5°C above pre-industrial levels... and even if we do, the impacts of climate change — like floods, heatwaves, storms, the spread of disease, and drought — will significantly increase.

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We don't yet know the full extent of the impact of Cyclone Idai on Mozambique, Malawi, and Zimbabwe, but the UN estimate that 600,000 people are affected in Mozambique and 900,000 in Malawi.

The UK government is providing £18 million in aid to the region and will also match public donations up to £2 million.

The UN Special Representative for Disaster Risk Reduction, Mami Mizutori, said: "Cyclone Idai is a clear demonstration of the exposure and vulnerability of many low-lying cities and towns to sea-level rise as the impact of climate change continues to influence and disrupt normal weather patterns."

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The World Bank says one hundred million people are at risk of being pushed into poverty by climate change by 2030, particularly in sub Saharan Africa and South Asia.

The Overseas Development Institute says this will rise to 720 million by 2050.

Most developing countries face a 40% shortfall in meeting their water demand by 2030.

(You may have seen the Environment Agency Chief Executive's speech about the potential for water shortages here in England earlier this week — if not, please look it up).

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Around the world, there is not enough large scale investment in the systems needed to manage climate change.

For example, we know early warning and social protection systems are more effective than humanitarian responses to disasters — in human and economic terms — yet investment doesn't reflect this.

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Even if you don't usually think about humanitarian aims through the prism of finance — that is economically short-sighted.

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However complex the language of finance and climate change may seem, the two simple truths are:

• A. We are not reducing emissions fast enough.

And,

• B. Businesses, infrastructure, technology, and people are not prepared for weather impacts that we are certain will get worse in the next 11 years.

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It makes financial sense for our investments to meet both of these concerns.

Four years ago, Mark Carney said "the tragedy of the horizon" is that the catastrophic impacts of climate change will happen beyond the planning cycles of most banks.

By the time the impacts are felt, it will be too late to act.

He discussed 3 risks to the financial system posed by climate change.

- Liability risks (i.e. can people be sued for their previous emissions when the impacts hit?);
- Transition risks (i.e. the risks of destabilising the economy as we reduce emissions and prepare for impacts);

And,

Climate change already costs money.

A UN study found there were 335 weather-related disasters each year around the globe from 2005 to 2015, almost twice the number seen from 1985-1994.

Swiss Re estimates natural disaster losses have averaged \$180 billion

annually in the last decade. And, remember, that is only insured losses.

In January — 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.

Now, I know what you're thinking...

"What does that mean for my mortgage?"

The insurance industry initiative ClimateWise — run from the Cambridge Institute for Sustainability Leadership — says losses on UK mortgages could double if global temperatures increase by 2°C and triple if warming hits 4°C...

Would mortgages be top of everyone's minds in a 4°C scenario?

I doubt it.

But — think about it, because we are currently on track for 3.5°C.

Weather events cause shocks to the economy by suddenly changing the availability and price of products.

For example:

In 2007/2008, drought in South and Southeast Asia reduced rice harvests.

India and Thailand put an export ban in place to protect domestic food security, which led to a spike in rice prices elsewhere.

In Senegal, a country that depends on imported rice, the increase in price led to food riots in Dakar in April 2008.

If a financial system is resilient — and can get back to normal again relatively quickly — then banks generally avoid taking action to stabilise the economy — because that could have unforeseen consequences further down the road.

But...

Last week, Guy Debelle, Deputy Governor of the Reserve Bank of Australia, said:

The recent IPCC report documents that climate change is a trend rather than cyclical, which makes the assessment much more complicated. What if droughts are more frequent, or cyclones happen more often? The supply shock is no longer temporary but close to permanent. That situation is more challenging to assess and respond to.

From the European Central Bank, executive board member Benoît Cœuré, has said:

Climate change will make it more difficult to correctly identify the shocks hitting the economy — which begs the question of banks: should they take non-standard, pre-emptive policy measures to avoid such risks... Catastrophic climate change could thus test the limits of how far monetary policy can go and, in the extreme, force us to rethink our current policy framework.

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Critics of these interventions say it is all very well bankers talking about this, but they haven't yet promised significant action.

Even in my most positive moments I don't pretend that green finance is now mainstream, but I do think something is beginning...

I look forward to Sarah Breeden talking about the Bank of England's action in a moment — which involves including climate change in its bank stress tests, and helping to set up the Network for Greening the Financial System.

This isn't only about banks.

All investors need to understand their money's impact better — whether they work in finance, or they have been automatically signed up to a company pension fund.

People need to ask:

Do businesses have the right skills at board level to manage climate change?

Are they properly considering their environmental impact?

Are boards putting aside capital expenditure for resilience measures to ensure business continuity?

Are asset managers telling the truth about green funds? Or are they blinding us with greenwash?

The Task Force on Climate-related Financial Disclosures is helping investors understand the impact of their money.

And, the Environment Agency Pension Fund has set up the Transition Pathway Initiative with the Church of England National Investing Bodies to assess how companies are preparing for the transition to a low-carbon economy.

These initiatives help.

In the autumn, I became the UK Commissioner to the Global Commission on Adaptation.

Led by Ban Ki-moon, Bill Gates, and Kristalina Georgieva, CEO of the World Bank, the GCA will present an agenda for scaling up adaptation ahead of the UN Climate Summit in September.

It will guide Action Tracks on food security, infrastructure, finance, local action, cities, and nature-based solutions.

These will build on existing initiatives, giving them added impetus to set and scale tangible targets.

The Commission will facilitate a Year of Action, culminating in a Climate Adaptation Action Summit in 2020.

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Also at the UN summit, the UK government will lead on climate resilience.

The government wants to deliver:

- 1. A systemic shift in the way the public and private sectors think about investment. With \$6 trillion per year to be invested in infrastructure up to 2030, investment decisions should account for, and respond to, climate risk.
- 2. Better capacity to manage climate shocks around the world. This includes better targeting of investments and building human and physical capacity to cope with current and future climate risks.

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This spring, the government has committed to publish the UK's first ever Green Finance Strategy, setting out the steps they are taking to attract investment into a clean, and resilient, economy and cementing the UK's position as a global leader.

I want to thank the United Nations Environment Programme Finance Initiative, the European Bank for Reconstruction and Development, and everyone here today, for helping us develop the GCA's paper on climate resilience and finance. I look forward to discussing this further as the evening goes on.

I also look forward to hearing about further developments from the UK government and the GCA during London Climate Week in July.

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In 2019 and 2020, there are many moments to help shift perceptions, increase demand, and co-ordinate action and investment on climate change.

All of this presents long-term opportunities for investors.

In a world that feels increasingly unsteady underfoot, investments with a

modest, stable return — that may have looked pedestrian in the past but are resilient to the impacts of climate change in the future — are beginning to look pretty good.

As market interest increases, we should be looking to incorporate resilience, and the UN Sustainable Development Goals, in the development of infrastructure, technology, and economies everywhere — from the vast Belt and Road Initiative of the Chinese government, to the 300,000 new homes a year our government is aiming at by the mid-2020s.

I recently spoke at a conference with a co-panellist who suggested that the implications of the economic transition to manage climate change were so great — that they could prove insurmountable in a democracy.

I disagree.

Our responsibility, as professionals in the finance industry is to show leadership, so that governments and the public can disprove that suggestion.

Why?

Because soon we will all be over the hill.

If we don't act, we may well reflect on where the horizon once was...

...and consider that the real tragedy was we spent our money in a way that was not just financially myopic, but morally bankrupt.

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Thank you very much.

Press release: Marlow is now better protected from flooding

On 8 March 2019, the Environment Agency hosted an event with project partners and guests to demonstrate that the Marlow flood alleviation scheme is now in operation. Construction work was completed in autumn 2018.

Guests at the event were shown how the flood risk to some 287 properties in Marlow has been reduced. They also saw how, should Marlow now suffer prolonged or heavy rainfall, as it has several times in recent years and before, the risk of flooding from the river and groundwater to these properties has been lowered.

The Environment Agency worked with Buckinghamshire County Council and Marlow Town Council to deliver the £9.5 million scheme. The Environment Agency

project team, including the contractors GBV, or GallifordTry and Black and Veatch, and consultants, were joined at the event by guests including the chief executive of the Environment Agency, Sir James Bevan, Dominic Grieve MP and representatives of the partners.

Guests were shown around the site by the project team to see what has been constructed. They were also shown the planned interpretation boards that will be installed on the site for future visitors to see what the scheme has included to make Marlow less vulnerable to flooding.

Sir James Bevan, Chief Executive of the Environment Agency, said

The Environment Agency has worked with the local community, Buckinghamshire County Council and Marlow Town Council to deliver this £9.5 million scheme. It will better-protect the beautiful town of Marlow from flooding, not only from the Thames, but also from groundwater. There are real environmental benefits, too, with 18 hectares of habitat created and more than 300 trees and 10,000 shrubs planted.

This scheme is part of the Environment Agency's plan to reduce the risk of flooding for 300,000 homes between 2015 and 2021."

The final phase of the scheme which includes reinstatement and planting work is continuing and will take place over the summer months.

This scheme is part of the Environment Agency's plan to reduce the risk of flooding from rivers, the sea, groundwater and surface water and from coastal erosion for a least 300,000 homes between 2015 and 2021. The Marlow scheme consists of new flood walls and embankments in the Gossmore Lane and Pound Lane areas of the town. It also includes a flood-storage area at Lower Pound Lane to replace the natural floodplain.

Low lying areas of Marlow are also prone to flooding from groundwater travelling up through the gravels found below the ground. So the scheme also includes a pumping system which pumps groundwater back into the Thames reducing the risk of flooding.

Modelling done by the Environment Agency shows that the scheme will benefit the 287 properties.

Press release: Marlow is now better

protected from flooding

Almost 300 properties included in flood-prevention scheme

News story: Dstl Reveals Venturefest Line Up for Small and Medium Enterprises

Discovering ways the Royal Navy might use artificial intelligence (AI) in future operations, and how desktop wargames help the Army learn risk analysis, are just two of the attractions lined up by the Defence Science and Technology Laboratory (Dstl) for Venturefest South on 29 March at the Ageas Bowl in Southampton.

Small and Medium enterprises (SMEs) will be able to hear about the skills and equipment needs of the Armed Forces, and the opportunities to sell to the defence sector. Commercial and technical experts from Dstl, as well as military representatives, will be available for one-to-one meetings to explain the simple qualification process for businesses to work with Government.

Dstl is seeking new supply-chain partners for a series of research projects due to start this year across a diverse range of technology. The Laboratory has already announced additional funding of £40 million to £45 million to spend with external suppliers this year and set up the Searchlight initiative to engage with non-traditional Defence suppliers and SMEs to help meet this need.

Dstl will also be supported by representatives from the Defence and Security Accelerator (DASA) which speeds the development of innovative ideas into exploitable products and services for defence and security customers.

Dstl works with a range of start-ups and SMEs, providing funding and guidance to develop new and innovative ideas to help protect the UK's Armed Forces, helping companies grow and boosting the regional economy.

By working with investors, Dstl also helps companies to commercialise the impact and bring new technologies to market. Licensing agreements have been signed for 125 technologies across defence and security, biometrics, life sciences, and diagnostics, which have created 580 jobs.

Rob Solly, senior lead for Searchlight commented:

SMEs are essential supply-chain partners for Dstl and contribute to the unique capability we have in defence science and technology. By encouraging innovation and helping companies get their ideas and products into the defence arena we aspire to boost the regional economy and UK prosperity, as well as protecting our Armed Forces. We understand the pressures on small enterprises and we are determined to make working with Dstl as straightforward as possible.

Venturefest South is a not-for-profit initiative that has been created and developed by a group of partners within the regional innovation economy including: Carswell Gould, Solent LEP, Innovate UK, the Knowledge Transfer Network, University of Portsmouth, Southampton City Council, Solent University, The University of Southampton, Portsmouth City Council, and Basingstoke and Deane Borough Council.

<u>Find out more, apply to take part in any of the pitching sessions, showcase</u> an innovation in the exhibition or sponsor Venturefest South 2019

Additionally, a host of opportunities exist for SMEs to work across Dstl's portfolio over the next 12 months, and through the SME Searchlight programme there will be a series of events, workshops and consultations to develop a broader supplier community, particularly in the fields of radio frequency engineering, artificial intelligence, synthetic biology and wargaming. The team can be contacted by emailing searchlight@dstl.gov.uk

News story: Essex haven for nature gets new protection

As the Essex town of Basildon celebrates its 70th birthday this year, <u>Natural England</u> has announced new protection for the iconic landscapes of nearby Langdon Ridge.

2019 marks the UK government's <u>Year of Green Action</u>, a year-long drive to help people to connect with, protect and enhance nature. Langdon Ridge is easily accessible from Basildon, and the newly-notified Site of Special Scientific Interest (SSSI) will help ensure it remains both a thriving place for nature, and a valuable green space enjoyed by future generations.

Around 345 hectares of land across parts of the town and surrounding areas has received legal protection for its nationally significant array of grassland, woodlands, rare plants and insects.

The new designation will ensure stronger protection for features such as wildflower rich grasslands, woodland habitats, as well as rare species such

as the Deptford Pink and the Grizzled Skipper butterfly.

The new SSSI will encompass sites that are well known for their natural history in the local area, including the <u>Dunton Plotlands Nature Reserve</u>, <u>Langdon Hills Country Park</u>, <u>Marks Hill Wood</u> and <u>Willow Park</u>.

Natural England's Interim Chief Executive, Marian Spain said:

Natural England is here to make sure that people and nature can thrive together. I am delighted therefore that we have been able to extend the protection for this nationally important network of sites around Basildon which as well as being of huge value for wildlife is a much loved and much used open space for local people.

The support from our partners and stakeholders across the area has been vital to our work and we look forward to continuing to work with them. This is an ideal area for people to make a commitment to get involved with the Year of Green Action, with lots of opportunity to engage with, enjoy and help protect nature close to where they live.

Habitat fragmentation is a key conservation challenge, and a key element of this designation is that it looks at how species use the landscape as a whole. The SSSI will ensure protection for not only the existing high quality environments, but also the interconnecting green corridors of habitat that enable species to move between locations.

The <u>Natural England</u> Board has confirmed the designation of the site after considering responses to a four-month long consultation.

Natural England Board member, Dr Simon Lyster said:

Langdon Ridge is an amazing wildlife-rich landscape within 25 miles of central London that fully deserves SSSI status.

It is particularly extraordinary because it is a large, 345 hectare mosaic of species rich grassland and woodland right on the edge of Basildon, providing a brilliant opportunity for local residents to enjoy nature right on their doorstep. Away from the town it offers fantastic views of the Thames Estuary and links in well with other SSSIs in that part of Essex.

Langdon Ridge is living proof that wildlife and people can both thrive if the will is there, and congratulations to all the local people and organisations who have made it possible.

Whilst nature conservation is the primary aim of the new SSSI, given its location on the urban edge, the importance of this area for people hasn't been ignored. The designation as a SSSI will ensure that local communities

will continue to have opportunity to connect with nature on their doorstep as part of their daily lives.

Research has shown how the natural environment provides society with benefits in terms of helping mental and physical health, offering informal recreation opportunities, inspiration for art, and helping people feel connected with their local area. This new SSSI will ensure nearby residents will continue to have this amazing natural resource protected in the long term.

Whilst Natural England has led on this new designation, this achievement is thanks to the hard work and support of many key stakeholders.

Natural England has worked closely with partners such as Essex Wildlife
Trust, Thurrock and Basildon Councils, and Basildon Natural History Society
This
months, as we work together to build a long term vision for a wildlife-rich, accessible environment around Basildon.

Eamonn Martin, Basildon resident and former London Marathon winner, said:

I know this area well from my many training runs around Basildon. It is marvellous news that more of our precious countryside will be protected for local people to enjoy.

Green action can be as simple as going for a run in the local park or changing your training route to take in a local nature reserve with public access.

I would encourage local residents and families to improve their health and get exercising, through walking and running, at Langdon Ridge.