

Collaboration, Community and the Road to COP26

Thank you for having me into your academic home.

As Dr Ramchunder has said, I am the British High Commissioner to Singapore, which is a brilliant job and one which makes me responsible for our whole relationship. It's a very broad relationship, but it's also historic and deep. So it is a challenging job too!

But our two Governments have distilled that all down into something we launched two years ago called SG-UK Partnership for the Future. You can see on the screen behind me (or on your own screens at home), how it has five pillars of some fantastically impactful and interesting work. One of those is the one which I'm going to talk to you about today: Climate and Sustainability.

I wanted to show you, to illustrate, how this subject is one of the key planks of our work together.

It is also the top foreign policy priority for the UK following our Integrated Review of Security, Defence, Development, and Foreign Policy, which the Prime Minister announced just last week. It's important because it is our biggest review of cross-Government policy since the Cold War.

We looked across our whole complex web of global relationships and interests and said that, over the next five years, this is the most important global issue for the UK's prosperity, security, and sovereignty.

So it is a real privilege and pleasure to be able to talk to you about it. And I hope it gives you some useful material for your studies, and encourages your interest in this really important subject.

Shall we start with a discussion about our perception of these issues?

Changing the way we approach the climate challenge

I've been invited to speak as part of your module titled 'Environmental Challenges: Asian Case Studies 1'.

It's absolutely right that we categorise some of the biggest issues here as 'challenges'. But if I may, it's also a slightly pre-2020 way of looking at things. What I mean is, like most of the rest of our lives, how we look at this has fundamentally changed over the course of the coronavirus pandemic.

Around the world, thinking of climate change and environmental issues as a problem has given way to a slightly different view. Surviving the virus has changed how we think about the quality of the air that we breathe; about our relationship with nature; and about the need for us to prioritise wellbeing

and sustainable growth.

Best of all, we have all seen, with our own eyes, the effect on the planet of slowing down our carbon-intensive economies: Crystal clear waterways, resurgence of wildlife and so on.

It's a tantalising promise of what is within our reach with decisive action.

So it's no surprise that people want things to be different when we get to our equilibrium after COVID – our 'new normal'.

At the same time as this change in mood, there has been a quiet technological revolution in renewable power.

When grids were scaled down as demand fell during COVID-19 lockdowns, we saw how fossil-fuel energy was the first to be switched off. In the UK, we went nearly 3 months without using any coal at all. That hasn't happened since 1882!

So why has that happened?

Well, the International Energy Agency said in October that solar had fallen in price between 20 and 50% more than they had predicted it would 2 years ago. That made it, they said, the cheapest form of electricity in history. And that is true here in Southeast Asia too.

The International Renewable Energy Agency says that the cost of solar is now the cheapest form of new energy in all of the ten countries in ASEAN.

It would be easy to dismiss this as a temporary blip due to the Coronavirus slowdown. But that doesn't look correct.

In China, Fitch described the 178% annual rise in offshore wind installations between 2019 and 2020 as the most important factor in reducing the use of coal and a trend that will continue following the country's commitment to reaching Net Zero by 2060.

Private investors spotted and bet on the trend many years ago. In our immediate neighbourhood, Thailand, The Philippines, and Vietnam have seen multi-billion [US] dollar influxes of Foreign Direct Investment over the last 10 years through feed-in tariffs for wind and solar.

In the UK, we have seen first-hand since the early 90s how 'green' and 'growth' are not mutually exclusive but mutually supportive. We have cut carbon emissions faster than any other rich country since 1990 – down 44% while growing our economy by more than 70% over the same period. So UK perceptions of this issue are to see us passing a tipping point.

2020 was the year in which all of the promise of our technological progress towards a cleaner planet was brought together with public expectations.

In spite of the pandemic, the world kept moving forward on this agenda. The NGO, Carbon Tracker, said that new commitments made in 2020 brought our

projected temperature rise down from 3.8c at the start of the year, to 2.9c by December.

We know there is much more to be done. But we are edging closer to our Paris target of keeping temperature rises under 2c.

So if that was 2020, what is in store for us in 2021?

Well the first thing is that it is an important year. All that opportunity and urgency needs to be seized. And we aren't doing that yet.

The UN released a report earlier this month which showed that although that all the optimism created by long term commitments is right, our shorter term actions to reduce emissions are just not keeping pace. They said we need to go at least three times faster in cutting carbon out of our economies. Thankfully, we may be cresting this wave at just the right time.

Vaccinations are gathering pace, and countries around the world are starting to raise their eyes optimistically to the horizon, to think about a recovery from COVID.

In June, the leaders of the seven largest economies – the G7, will gather in Cornwall, England under the UK's Presidency, to discuss the recovery. Our Prime Minister is clear there can be only one kind of recovery: A green one.

In October China will host the 15th Conference of the Parties of the Convention on Biological Diversity. The same month, our partners for COP26, the Italians, will host the G20 in Rome, with one of its three pillars of action focussed on the planet.

And to round it off, in November, the UK will preside over COP26 in Glasgow, Scotland. It is a critically important global conference on climate change for all the reasons I've set out.

But it is also so important, because it is the fifth such conference to take place since the momentous Paris Agreement in 2015. The world is rightly watching all 197 signatories, to check on progress. And it is the UK's job as President to hold them to it.

A job we take very seriously.

The road to COP26

We won't all show up in Glasgow to roll up our sleeves. That series of moments I mentioned earlier, stretched out over the whole year are all crucial in achieving what we need to from COP26:

First, we want ambition from countries about committing to their fair share in reducing emissions, to mitigate climate change.

That means Nationally Determined Contributions (NDC) need to be updated, and

made stronger to ensure those short term actions I mentioned earlier start to really add up to the change we've promised by the middle of the century.

We need more countries to join the 70% of the global economy to already have a plan to reach net zero by about 2050, by producing their own Long Term Strategies (LTS).

In the UK, we were the first major economy to write it into law, committing to have a carbon neutral economy by 2050. We updated our NDC in December, pledging to reduce emissions by at least 68% by 2030.

Around the world, I see gathering pace in these long-term commitments. China, Japan, EU, Republic of Korea all announced strong targets last year, and it has been fantastic to see the US re-join the Paris Agreement so swiftly under President Biden. We expect them to also announce bold new commitments in April. By then, more than 70% of global GDP will be on a path to Net Zero.

But we need more action on shorter term reductions to back those up.

In this region, Singapore has gone the furthest in these steps, with a new NDC and LTS announced in March. I will talk more about that later.

Next, we need to do more to help climate-vulnerable countries to become more resilient, and adapt to climate change. The sad fact is that, even if we achieve our Paris targets, there will be changes to the climate and how we live.

Last month, the UK's Prime Minister chaired the first ever UN Security Council debate about the direct relationship between climate change and conflict. We must help populations that are vulnerable to that, including in this heavily affected region.

The Philippines, Vietnam and Myanmar experienced more extreme weather events in the last 10 years than all the other most climate-risk affected countries combined.

The UK launched an Adaptation Action Coalition in January to push donor countries to do more to support developing countries to raise the finance necessary for this work. And through our renowned Newton shared research programme, Southeast Asian countries are working with our Met Office to model weather patterns and sea level rises, to protect vulnerable areas.

Third, is finance. The UK is calling on developed countries and development banks to come forward with much more ambitious commitments to ensure we meet the \$100 billion/year goal of international climate finance.

Finally, as you would expect, international cooperation is essential. We want to see countries begin the discussions necessary to ensure the negotiations in Glasgow are a success and we are able to resolve outstanding elements of Paris rulebook together.

A very important example of relevance to Singapore is something called Article 6, which is the part of the Paris Agreement concerned with the flows

of finance to properly incentivise action by developed and developing countries. I will return to that subject later.

So let me pause there for a moment to catch my breath, and let you absorb three things from that first section:

- 1) The uniqueness of the point in time we find ourselves in. We should be optimistic about that, but we must grab it.
- 2) The momentum of global multilateral action should be seen as a final sprint towards COP26 in November. And,
- 3) There is much work still to do!

I will let you watch a quick video to give you an insight into how COP will work.

The Southeast Asian context

In this next ten minutes or so, I want to talk to you more specifically about this fascinating region, before then zeroing-in on how the UK is working with Singapore. Let me start by restating some home truths.

I am sure many of you know much of this already. But I will put it at the front of your minds, for context here.

Southeast Asia is growing at quite a staggering pace. Both in people and economy terms. Over the last 10 years, the ten ASEAN countries have seen GDP growth of around 7% GDP each year.

COVID has only temporarily stunted that, with a regional drop in output of 0.7% in 2020 which the Asian Development Bank says will return to nearly 7% again this year.

Even the worst-hit economies of The Philippines and Thailand expected to return to strong growth this year as the recovery kicks in. By 2030 the region's combined economy will be 4th largest in the world.

But that growth has been extremely carbon and resource intensive.

So the first thing I want to discuss is carbon and other greenhouse gas emissions, and reducing them.

By the start of last year the region, as a whole, was the 4th biggest source of Green House Gas emissions in the world. Commitments to cut down those emissions, and transition to clean forms of energy have been cautious, and tend to under promise and over-deliver. That is quite common across Asia, but it feels different to the UK experience.

UK experts, who have been around through our 1990 to 2020 journey, say that having a bold but achievable commitment to aim for means businesses adjust and plan, and you attract the investments and innovation you need to achieve and go beyond that target.

But across the region, there are pockets of promise.

In October, The Philippines announced a moratorium on new coal power. Vietnam is building Asia's largest offshore wind farm near the Binh Tuan Province. Malaysia's state energy utility Petronas has committed to be carbon neutral by 2050

The energy transition is happening here, but just not yet as fast as we'd want. There are many reasons for that.

For example, technology is not always accessible and adding renewables to the energy grid needs to be planned to manage peaks and troughs of demand, including through storage.

The business environment is often set up around state monopoly energy suppliers whose operations may be subsidised. While that is essential to increase accessibility to poorer people, it also means the competitiveness of renewables isn't as quickly turned into consumer choices.

Fossil fuel plants tend to be larger than renewables and by their nature need an ongoing flow of raw materials whose costs are variable. That makes them more attractive to corruption, and therefore more difficult to disentangle from those vested interests.

Of course an energy transition doesn't happen overnight, and the people employed in fossil fuel industry need to be moved to new jobs too. That is what we call a 'Just Transition'.

In the late 70s and early 80s, we in the UK learnt the hard way what happens when you move away from coal without taking full account of those social factors. My own region of Cumbria was one of those in the UK, which suffered some quite deep scars to our economy and employment.

So we have a real and genuine appreciation for getting it right. But we also know how much of an opportunity the recovery from COVID-19 represents to grow back faster and more sustainably, creating good well paid jobs as a result.

The international consultancy McKinsey analysed last year that, for every million dollars spent on renewable power, you can create nearly 4 times as many jobs than if you invested that same money in fossil fuels. This is really important to consider now, as we start to look beyond COVID-19, and governments are spending vast sums of money to rebuild.

And it is also really important for diversity, with the International Energy Agency telling us that women make up 32% of employees in the renewables sector, compared to just 22% in fossil fuel sectors.

We need to ensure that money goes the furthest possible in terms of jobs and growth. So that the recovery is a green one and we build back better.

I mentioned resource intensiveness too. In a region like this, some of the most abundant resources are natural forests and agriculture. Southeast Asia forests make up 15% of the global total. Across the region, agriculture is

also a big source of employment, giving more than 40% of people a source of income.

But consumption is not always sustainable, and the value of nature is not yet properly accounted for in that consumption. What do I mean by the value of nature?

Well, as you will probably have learnt elsewhere in your course, natural forest ecosystems hold carbon – from seagrasses to mangroves to tropical rainforest to peatlands.

The forests in this region hold about 9% of the whole carbon 'stocks', of the world. So if you cut them down you lose the ability to draw that out of the atmosphere, and we move even faster towards catastrophic climate change. This has led to the world developing the idea of Nature-based Solutions to address climate change. Because protecting nature can have such profound, and cost effective benefits in mitigating emissions.

The trouble here in Southeast Asia is that deforestation is accelerating. In the last 10 years, the region lost 8 million hectares of forest a year. In the ten years before that, it was just 1.8 million hectares a year.

The loss of all those natural habitats is entwined with many other important issues beyond purely losing that ability to meet our Paris targets.

We know for example that the illegal wildlife trade encroaches on these habitats, and extracts value into illicit networks that use those proceeds to fund organised crime.

We need to also consider the knock-on risk to our own health. The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services said last year that our increasing penetration of such habitats could be part of the reason for the rise in pandemics like COVID-19.

This region is home to a third of the world's coastal and marine habitats. It contains four of our 36 Biodiversity Hotspots. Those areas make up less than 2.5% of the Earth's area, while supporting more than half of its plant life and over 40% of its birds, mammals, reptiles, and amphibians. They are called hotspots because they are also terribly threatened. They have less than 30% of their original vegetation left.

The Dasgupta Review

Last month, a Professor of UK's University of Cambridge completed a momentous study on behalf of Her Majesty's Treasury, the UK's Finance Ministry. His name is Sir Partha Dasgupta, and the study is called 'The Economics of Biodiversity'. Professor Dasgupta calculated that we are consuming 1.6 Earth's worth of natural resources.

That illustrates to me, quite vividly, the unsustainable relationship that we have with nature. The reason why, he says, is that our economic accounting process does not take account of the real value of nature and biodiversity.

So it comes as no surprise that it incentivises economic choices that lead us down a path which, as he puts it, “could have catastrophic consequences for our economies and wellbeing”.

The UK Government is preparing a response to the Report, which will set out how we will use our Presidency of the G7 and of COP26 to make the changes the Professor argues are necessary. The Prime Minister has already committed to spending one third of UK international climate finance on nature – \$5.6 billion [£3bn] between now and 2026.

I’ll let you watch another quick video which gives a tiny bit more detail, and I know you’ve had some pre-reading on that report too.

Working with Singapore to support sustainability transitions

So I have now given you the regional context. We are on a path of rising emissions that is out of step with the rest of the world. There are glimmers of hope that we may move away from coal, and the opportunities for consumers and businesses are enormous.

There is also an existential threat to the natural resources of this beautiful region. All of which requires a shift in economics and flows of money to address.

So let’s now talk a bit about this country. Singapore’s role in all this reflects its uniqueness amongst its neighbours. Its own emissions are about 0.1% of the global total. Its population of 5 million live in the most developed country in the region, in an area about 0.3% the size of the United Kingdom. The country is an important financial and technological hub.

The actions it takes politically, and through those prisms, ripple across Asia and the rest of the world. So the UK is working with Singapore with that in mind.

Last year we brought it all together in our first ever Climate Bilateral Dialogue, which is an annual discussion to build our shared work plan to drive change.

Living in Singapore as savvy, connected, and news-aware people, you will have noticed the increasing focus here on Singapore’s green growth.

February’s Green Plan is a five-ministry blueprint for what the country wants to achieve, backed up by some big-ticket money in the recent budget. The government rightly considers that ensuring Singapore becomes a green financial services hub is key to its economic future.

As one of the world’s top financial centres, it’s really well positioned to benefit from the \$2 trillion of investment that will be needed each year to achieve Net Zero by about 2050.

What it chooses to do in its financial services sector will mean the

difference between money flowing to a coal plant or one that is powered by renewable energy. Or the development of innovative financial technologies that can increase access to insurance to areas in this region, which experience some of the greatest levels of climate disasters anywhere in the world, yet insurance coverage can sometimes be as low as 1%.

Singapore is also clear-eyed about the future, and where it is taking us. It sees the writing on the wall, which is why it is the leader in Southeast Asia on these issues. It is acting because it knows it must, for the sake of the planet and its citizens. But also because like other developed countries, it can see the huge economic opportunities to play for as the US, China, and others compete for a slice of the green growth pie.

So we are working with Singapore, with all that shared regional interest and potential collaborative impact in mind. I want to give three specific examples of what we're doing here which will help show what I mean.

I've chosen these to illustrate how this work touches so many areas of our relationship:

First, we are working with Singapore to ensure that the global financial system is rebalanced so that we can implement the Paris Agreement.

The reason we want to do that is because if you get the system fixed, it will mean capital will flow towards investments whose values reflect their climate impact. A really interesting area we're doing that with Singapore is to develop something called 'carbon markets'. What I mean by that is putting in place systems that allow us to see a financial cost of carbon, and for us to then incentivise the trade in that carbon in a way that encourages carbon emissions to be mitigated.

It's a vital part of unlocking private and public finance to flow into the region towards investments that can allow us to offset emissions, as part of a plan to reduce them to net zero. You might have seen something like this yourself the last time you booked a flight – what may seem like a lifetime ago!

Offsetting your emissions is part and parcel of that, and there are many different ways you can do that, all with different standards and means of verifying the offsetting activity. So the job for the international community is to standardise those offsets, and make sure they're credible, so we avoid so-called green-washing.

We're doing a few things with Singapore to achieve that.

First, we're working to complete agreement at the COP26 Summit, of something called Article 6 of the Paris Agreement. You might remember I mentioned this earlier. The importance of it, is that it could give us a rulebook for country-country trading, or open trading of such offsets.

This is hugely important for governments, but it is also something that has enormous engagement from the private sector. These kinds of offset schemes are growing already, reflecting the pressure from consumers and businesses

for action.

But we need to scale them up. We are working with 50 of the biggest potential players in future carbon markets to grow the size of the global voluntary carbon market to 15 times its current size by 2030. Those players include organisations here in Singapore like DBS, Standard Chartered, and Temasek.

The next big area I wanted to highlight is on technology and research.

Singapore has some pretty severe geographic constraints, which it needs to overcome to decarbonise. It is innovating to try to solve those challenges, for example by exploring floating solar farms at places like the Tengoh Reservoir.

It is investing heavily in future tech such as hydrogen and carbon capture, which will be part of the solution. But it will probably always need to look to its neighbours to supply enough renewable energy, in the same way it imports gas now.

Last October, at the Singapore International Energy Week, the Energy Markets Authority (EMA) announced a trial importing 100MW of renewable energy over two years from Malaysia. That is just 1.5% of Singapore's energy needs, but on the horizon is even bigger ambitions. A project called Suncable is in development to supply up to 20% of Singapore's energy from Australian solar power when it reaches here in 2027.

The reasons these are important are because they act as a 'pull' to the rest of the region, using innovation and market signals to encourage adoption of renewables, and a cross-regional energy grid from which everyone benefits.

The UK has a huge amount of experience in these things, from our own grid decarbonisation and ensuring the reliable import of renewable energy from Europe. Our energy regulator, Ofgem, signed an agreement with Singapore's EMA last year, to support it in decarbonising Singapore and the region's grid and sharing that experience.

The final area of cooperation with Singapore that I want to highlight is around our shared desire to uplift the region and build capacity.

For the last year in which figures are available, the UK's global development assistance budget was the third largest in the world. Despite the COVID-induced reduction in our aid budget, the Prime Minister has confirmed that we will spend \$21.6 billion [£11.6 billion] over the next five years, in tackling climate change. That is double the last five years. Much of that will be in this region, for all the reasons I have mentioned already.

I am also really proud that even before taking on the Presidency of COP26, the UK was the only country to have a dedicated network of Climate Attaches in this region. These are experts based in our embassies whose full-time job it is to advise Ambassadors and High Commissioners like me what we need to do to achieve all of these things. And to work with our hosts, tirelessly, to make those things happen.

Singapore is eager to work in a similar way in the region to share its expertise and experience, and I am delighted to have seen that work so effectively last year to raise regional ambition.

Last September, Singapore's National Climate Change Secretariat and its Chief Climate Negotiator Mr Joseph Teo worked with us to deliver a capacity-building event to build new five year commitments from the region. Joseph gave an expert address on Singapore's experience, and an impassioned plea for action.

Before the event, only Singapore itself had submitted one of these NDC commitments. In the three months that followed, four other countries followed suit. A superb example of our cooperation leading to practical change.

I have talked for nearly forty minutes now and I think it's time for me to wrap up. I am excited to hear your thoughts and questions.

I hope I've left you with a good sense of what we're up to and why it matters, but I also hope you'll be inspired to find out more.

I started by telling you about the global context and what we must do this year.

I brought us into Southeast Asia, where I described the complexity of the challenges, and how important the region is to our chances as a planet.

And finally, I illustrated – amongst the constellation of our diverse climate work with Singapore- some of the ways in which we are working together to overcome some of the challenges we're faced with, while making full use of this Country's unique strengths.

Let me end with this.

Last week, I had the pleasure of welcoming Minister of Sustainability and Environment, Grace Fu, for our first ever COP26 Singapore Youth Dialogue. It was a superb, invigorating, and humbling afternoon reminding us that we in Government do not have a monopoly on the answers.

It also showed me quite clearly that talking to young people like you is not only a necessity to deliver an inclusive COP26, but will also make that a more successful and ambitious conference in Glasgow.

So I look forward not just to your questions and reflections, but to your advice. We can only succeed if you play your part too: Challenge us, innovate, participate, with all your diversity of thought.

As the UK's COP President-Designate Alok Sharma likes to say, we are all in this. Together for Our Planet.

Thank you very much for listening.

FCDO Smart Sustainable Cities project: 2021 edition

Ahead of [COP26 in Glasgow](#) in November, the 2021 edition of the Smart Sustainable Cities project aimed to raise climate ambition and promote effective implementation of city-level decarbonisation projects in three key areas:

- resilience and nature-based solutions
- circular economy
- sustainable transport

Due to COVID-19 restrictions this year, the team delivered seven virtual working sessions collaborating closely with other government departments such as [Department for International Trade \(DIT\)](#), [Department for Business, Energy and Industrial Strategy \(BEIS\)](#) and the COP 26 Unit, building a group to tackle climate action and begin a shared journey in the build up to COP26.

The workshops brought together cities from across Europe and were hosted virtually by leading cities in each key area:

- Manchester City Council for resilience and nature-based solutions
- Glasgow City Council for circular economy
- Aarhus City Council (Denmark) for sustainable transport

Our delivery partner in this project was Arup UK.

The concept for this year's edition aimed to create a sense of community through a shared journey using a 'Share, Solve and Support' structure. This concept was delivered through two sessions per city (Share and Solve) and a joint final session (Support) to bring all participants together and allow for cross-fertilisation of ideas.

High-profile speakers at the workshops included:

- Emma Hopkins, Her Majesty's Ambassador to Denmark
- FCDO Europe Director, Sarah Taylor
- Head of the Europe Strategy Department, Hazel Cameron
- COP26 Unit Cities and Regions Engagement Lead, Christine Mosedale
- BEIS European lead for the COP26 Zero Emission Vehicles campaign, Isobel Neale
- Manchester City Council Councillor, Angeliki Stogia
- Manchester City Council Strategic Director of Growth & Development, Louise Wyman
- Glasgow City Council Councillor, Susan Aitken
- Glasgow City Council COP26 Stakeholder Manager, Duncan Booker

- former Copenhagen Mayor and currently Aarhus's Green Mobility lead, Morten Kabbell

FCDO and Department for International Trade

The FCDO has worked closely with the Department for International Trade (DIT) to deliver this project.

International delegates can learn about the wealth of UK expertise, both academic and commercial, in the smart city sector through the [Smart Cities Directory](#) and on the Virtual Engage Space. They can also consider how to work with UK smart city companies to achieve their sustainability requirements.

Please [email Susannah Fairbairn](#) for more information on the UK's smart cities ecosystem. Susannah would be delighted to introduce you to UK companies and facilitate meetings and demonstrations.

Further information

If you would like to learn more about this initiative, please contact the Prosperity Team at the Madrid Hub, [Estibalitz Morras, Prosperity Programme Manager](#)

Previous editions of Smart Sustainable Cities

Glasgow: December 2019

Key themes included driving innovation in the circular economy; systemic change across and within sectors; experiencing Glasgow city showcase initiatives and connecting with other city experts for practical knowledge.

Madrid: February 2019

Key themes included transforming mobility in the low carbon city and smart, healthy solutions at city-system scales.

[February 2019: Madrid](#)

London: March 2018

Key themes included data management / data driven economy, common ticketing systems, e-mobility and the Internet of Things.

[March 2018: London](#)

Bristol: February 2018

Key themes included transport, energy efficiency in buildings, smart grids and renewable energy and the circular economy.

[February 2018: Bristol](#)

Manchester: December 2018

Key themes included smart electricity, heat, cooling and storage networks / grids.

[December 2018: Manchester](#)

Plans announced to phase out lead ammunition in bid to protect wildlife

- Government sets out the restriction work to be carried out in the first year of UK REACH, the UK's new chemical regime
- Evidence shows lead ammunition harms the environment, wildlife and people
- Consultation will seek public's views on restriction proposals

Lead ammunition could be phased out under government plans to help protect wildlife and nature, Environment Minister Rebecca Pow announced today [23 March].

A large volume of lead ammunition is discharged every year over the countryside, causing harm to the environment, wildlife and people. The government is now considering a ban under the UK's new chemical regulation system – [UK REACH](#)– and has requested an official review of the evidence to begin today with a public consultation in due course.

Research by the [Wildfowl and Wetlands Trust](#) shows that between 50,000 to 100,000 wildfowl die in the UK each year due ingesting lead from used pellets. Despite being highly toxic, wildfowl often mistake the pellets for food. A further 200,000 to 400,000 birds suffer welfare or health impacts, and animals that predate on wildfowl can also suffer.

Lead ammunition can also find its way into the wider environment and the food chain, posing a risk to people if they eat contaminated game birds. Studies have also found that lead poisoning caused lowered immune systems in wild birds, potentially aiding the spread of diseases such as avian influenza (bird flu).

Environment Minister Rebecca Pow said:

Addressing the impacts of lead ammunition will mark a significant step forward in helping to protect wildlife, people, and the environment.

This is a welcome development for our new chemicals framework, and will help ensure a sustainable relationship between shooting and

conservation.

The announcement today has been welcomed by environmental organisations.

**Dr Julia Newth, Ecosystem Health & Social Dimensions
Manager at the Wildfowl and Wetlands Trust (WWT), said:**

Conservationists, including WWT, shooting organisations and game meat retailers have recognised the toxic risks from lead ammunition to people and the environment. Regulation of its use in all shooting, wherever this may happen, is very much needed as soon as possible to protect human and animal health and to enable us to move towards a greener and safer future.

Shooting organisations are also supportive of transitioning away from the use of lead ammunition and are working with government to bring this about.

The Environment Agency, together with the Health and Safety Executive, will now start a two-year process to review the evidence, conduct a public consultation and propose options for restrictions.

Now we have left the EU we are able to make our own laws. UK REACH allows decisions to be made on the regulation of chemicals based on the best available scientific evidence, ensuring chemicals remain safely used and managed.

Notes to editors:

- The use of lead ammunition in England is restricted by the Environmental Protection (Restriction on the use of Lead Ammunition) (England) Regulations 1999. (Similar existing regulations apply in Wales with different definitions adopted in Scotland and Northern Ireland), These Regulations prohibit the use of lead ammunition on all foreshores in England, in or over specified SSSIs (predominately wetlands) and for the shooting of all ducks and geese, coot and moorhen. The plans announced today will consider phasing out the use of lead ammunition across all environments across England, Scotland and Wales.
- The Government is also initiating a restriction on substances with certain hazards in tattoo inks and permanent make-up.

[UK government sets out bold vision for](#)

the future of clinical research delivery

- Strengthen the UK's renowned research expertise as a world-leader in designing and delivering research
- Ambitious vision to unlock the true potential of research putting patients and NHS at its heart
- Using the lessons from COVID-19 to build back better, the government will create a patient-centred, pro-innovation and digitally-enabled research environment

Patients, clinicians and researchers across the whole of the UK are set to benefit from the ambitious vision for the future of clinical research delivery in the UK as the government sets out to create more efficient research delivery, more diverse and accessible research, and to embed research in the NHS.

[Saving and improving lives: the future of UK clinical research delivery](#), published today and developed by the UK government and devolved administrations, sets out how we will deliver faster, more efficient and more innovative research – from the streamlining of costing, contracting and approvals processes to the HRA's rapid ethics review pilot, which aims to halve the time to provide a final opinion for research applications.

Using best practice, participating in research will become more accessible, increasing diversity and allowing more people across the whole of the UK to take part. Working with Centres of Excellence, such as the Centre for BME Health in Leicester, there will be more support for research in more diverse and under-served communities and innovative approaches like the University of Birmingham's Dare2Think clinical trial, which has used remote eConsent and digital follow-up methods to recruit 3,000 patients across England with atrial fibrillation for their research.

The NHS will be encouraged to put delivery of research at the heart of everything they do, making it an essential and rewarding part of effective patient care. This means building a culture across the NHS and all health and care settings that is positive about research, where all staff feel empowered and supported to take part in clinical research delivery as part of their job.

Matt Hancock, Health and Social Care Secretary, said:

Clinical research is the backbone of healthcare – it is the way we improve the detection, diagnosis, treatment, and prevention of disease and improves the lives of patients across the country. This has never been more true than in our response to the pandemic.

By taking advantage of our world-renowned research expertise, and a strong partnership between business, academia, the NHS and

government, we are determined to make the UK the best possible place to carry out clinical research that will improve the health of people here and across the world.

Ground-breaking technologies, data and analytics will transform healthcare and save lives. Now is the time to seize the opportunity and make this vision a reality.

The COVID-19 pandemic has brought into focus the strength and importance of the UK's research base. Rapid delivery of clinical trials, such as RECOVERY, have shown how the UK can set up trials in record time without any loss of rigour. These strengths in research delivery enabled the UK to identify the first proven treatment for COVID-19, dexamethasone, which has cut mortality rates by as much as one-third in COVID-19 patients needing ventilation and is estimated to have saved up to 27,000 lives in the UK and hundreds of thousands of lives around the world. Our research has also made a leading contribution to the international vaccine effort – shining a light on the pathway back to normality.

Important lessons have also been learned from the pandemic about where we can improve, such as empowering healthcare and research workers, who have worked to take care of us during the pandemic, to ensure our workforce is supported and resilient to future challenges. We have also seen the need to go even further in terms of innovative trial design and delivery.

Lord Bethell, Minister for Innovation, said:

We are rapidly approaching a step change in global healthcare, with new technologies and treatments transforming the way we diagnose, treat and prevent illness.

We need to act now to position the UK at the forefront of this healthcare revolution. Our vision sets out how we will achieve a clinical research delivery system in the UK which is innovative, delivers for all research sponsors and patients and is resilient in the face of future healthcare crises.

The vision is built around 5 key themes:

1. Clinical research embedded in the NHS: to create a research-positive culture in which all health and care staff feel empowered to support and participate in clinical research as part of their job.
2. Patient-centred research: to make access and participation in research as easy as possible for everyone across the UK, including rural, diverse and under-served populations.
3. Streamlined, efficient and innovative research: so the UK is seen as the best place in the world to conduct fast, efficient and cutting-edge clinical research.

4. Research enabled by data and digital tools: to ensure the UK has the most advanced and data-enabled clinical research environment in the world, building on our unique data assets to improve health and care.
5. A sustainable and supported research workforce: which offers rewarding opportunities and exciting careers for all healthcare and research staff of all professional backgrounds – across both commercial and non-commercial research.

To deliver these aims, several priority areas have been identified, such as improving the speed and efficiency of setting up studies, building upon digital platforms to deliver clinical research, and making research more diverse and more relevant to the whole UK. This will break down traditional barriers and deliver a patient-centred and pro-innovation clinical research environment.

Launch of the UK-wide vision will be followed by implementation plans and strategies setting out how the UK government and devolved administrations will begin to deliver the vision during 2021 to 2022.

Dr William van't Hoff, Chief Executive of the NIHR Clinical Research Network, said:

Clinical research is a core part of an innovative and forward-thinking health and care system. Our learning from the pandemic shows that embedding clinical research within the NHS is achievable and delivers both for patients as well as for the NHS. Through implementation of this vision, more healthcare professionals will be able to become involved in research, improving care and benefiting patients across the country.

The vision reflects the ambition of all 4 UK governments and has been developed through a broad cross-sector approach involving NHS, medical research charities, life sciences industry and academia. Continued collaboration across sectors and organisations will ensure the key action areas will be delivered.

Eluned Morgan, Minister for Mental Health and Wellbeing for the Welsh Government, who is responsible for research and development, said:

We promote and support health and care research to ensure it is of the highest international scientific quality, is relevant to the needs and challenges of health and care in Wales, and improves the lives of patients, people and communities. The vision we are presenting today puts clinical research at the heart of what we want to achieve and means that Wales is playing its full part in delivering a world-leading UK research system.

Health Secretary, Scottish Government, Jeane Freeman, said:

Scotland is home to a vibrant and innovative research environment. Through NHS Research Scotland and the Chief Scientist Office of the Scottish Government, world-leading research is led, supported and delivered across our NHS and universities. This has already transformed the lives of patients in Scotland, UK and around the world. The vision for clinical research we are launching today demonstrates continued commitment to build on our strengths, work collaboratively and ensure everyone can benefit from advances in healthcare.

Robin Swann, Minister for Health, Northern Ireland Executive, said:

In Northern Ireland, we are at the midpoint of our 10-year Strategy, 'Research for Better Health & Social Care', which sets out how the health, wellbeing and prosperity of the Northern Ireland population benefits from excellent, world-renowned R&D in health and social care. The vision for the delivery of clinical research we are launching today provides added impetus to our plans and ensures we can play our full part in making the UK the best place to carry out innovative research for the benefit of all.

The vision for the future of UK clinical research delivery has been developed by the UK Recovery, Resilience and Growth programme. This 4-nation cross-sector group is made up of the key organisations involved in the delivery of clinical research in the UK, including:

- Association of the British Pharmaceutical Industry (ABPI)
- Association of Medical Research Charities (AMRC)
- Chief Scientist Office, Scotland (CSO)
- Department of Health and Social Care (DHSC)
- Health and Care Research Wales (HCRW)
- Health Research Authority (HRA)
- Health and Social Care, Northern Ireland (HSCNI)
- Medicines and Healthcare Products Regulatory Agency (MHRA)
- MedTech industry representation
- NHS England and NHS Improvement (NHSE/I)
- NHS Digital
- NHSX
- National Institute for Health Research (NIHR)
- Office for Life Sciences (OLS)

Development of the vision has been informed by the recommendations of the Life Sciences Council's Clinical Research Working Group, the Clinical Research Coalition led by Baroness Blackwood, and detailed consultation with NHS, academia, regulators, life sciences industry, medical research charities, patient participants and the public.

Delivery of clinical research across the UK:

- in England, the NHS is supported by the National Institute for Health Research (NIHR) alongside other networks delivering research. As one of the largest national clinical research funders in Europe, NIHR provides the staff, facilities, training and technology that enables research to thrive
- in Northern Ireland, Health and Social Care Research is supported through the Health and Social Care R&D Division of the Public Health Agency, to deliver on the 10-year strategy, 'Research for Better Health and Social Care'. This strategy sets out how the health, wellbeing and prosperity of the Northern Ireland population will benefit from excellent, world-renowned R&D in health and social care, that is led from Northern Ireland
- in Scotland, NHS Research Scotland (NRS) supports clinical research activity, through partnership working between the Chief Scientist Office of the Scottish Government and Scottish Health Boards. NRS works with Scottish universities and other organisations to ensure that Scotland provides the best environment to support clinical research
- in Wales, the NHS is supported by Health and Care Research Wales, which promotes and supports health and care research, to ensure it is of the highest international scientific quality, is relevant to the needs and challenges of health and care in Wales, and makes a difference to policy and practice in ways that improve the lives of patients, people and communities

Restrictions under new chemical regime announced for first time

The Government has today (23 March) set out the first restrictions to be initiated under its new chemical regulation system, UK REACH, to tackle risks posed by chemicals.

The launch of the UK REACH programme includes plans to initiate the restriction process on lead ammunition which is used widely in the shooting industry and causes harm to the environment, wildlife and people.

Certain harmful substances that can be found in tattoo inks and permanent make-up could also be restricted. The ink in tattoos can sometimes contain substances that can cause health effects, most commonly skin reactions, such as irritation or sensitisation. The substances this restriction proposal will consider includes, but is not limited to, substances that can cause cancer,

are dangerous to reproduction, skin sensitisers and irritants.

A restriction will be introduced if evidence shows an unacceptable risk to human health and the environment, and after a public consultation. The review of the evidence will be conducted by the Health & Safety Executive (HSE), with support from the Environment Agency (EA). They will investigate the risk of per- and polyfluoroalkyl substances (PFAS) and consider how best to manage any identified risks.

PFAS are a group of over 9,000 different chemicals, some of which are already banned or highly restricted. In industry, these substances are used as stain repellents, coatings and fire-fighting foams. The chemicals in PFAS are extremely persistent in the environment; the substances can accumulate in animals and can also be toxic this means PFAS are of growing concern for both human health and environmental reasons.

Environment Minister Rebecca Pow said:

The plans announced today are just the first step in a wider programme of work we are able to pursue under the new independent chemicals framework UK REACH.

We will continue to review what further measures we can explore to safeguard human health and the environment based on robust science and the best available evidence.

Based on the commitment to having control of our own laws, the UK established its own independent chemicals regulatory framework from 1 January 2021. UK REACH allows Great Britain to make decisions on the regulation of chemicals that are based on the best available scientific evidence, ensuring that chemicals remain safely used and managed.