<u>Press release: Bognor Regis business</u> saves lives with UK aid

<u>Polestar Cooling</u> and their national partner <u>Dulas</u> produce solar-powered fridges that are used to store and preserve vaccines in countries where power supplies are often sporadic. Outside of safe temperatures, vaccines deteriorate and become unusable.

DFID, is working with <u>Gavi</u>, <u>the Vaccine Alliance</u>, Polestar Cooling and Dulas to supply these life-saving solar fridges to Djibouti and Togo.

International Development Secretary, Penny Mordaunt, said:

From the telephone to the solar fridge, British invention and innovation continues to make a huge difference across the world.

UK aid is a badge of hope for millions of people, and that starts with the work of fantastic Brits like those manufacturing these life-saving devices in Bognor Regis.

Our work with Gavi not only protects over half of the world's children from disease, but tackles outbreaks before they can reach our shores.

This month Dulas, which also has offices in Wales and Scotland, delivered 113 solar medical fridges to Togo, and last year sent 26 to Djibouti. Between 2015-2017 the company installed almost 2000 fridges with support from Gavi, reaching some of the world's most vulnerable people. These fridges mean that children in countries like Burma and Sierra Leone are now being given lifesaving vaccines.

Dulas invented the first ever solar-powered medical refrigerator in 1982 and today, is one of the world leaders in solar-powered medical equipment.

CEO of Gavi, the Vaccine Alliance, Dr Seth Berkley, said:

Vaccines are not like normal pharmaceuticals — they are extremely sensitive to temperature and can quickly become ineffective if they are not kept cold at all times.

That's why innovative solar refrigerators like those produced here by Dulas are so important. They ensure that even the most remote community with no access to electricity can still protect their children against some of the world's deadliest diseases.

Working with the private sector, we are bringing together a great

partnership of British expertise, British business, and UK aid to save lives and empower communities across the globe.

• Notes to Editors:

- Gavi, the Vaccine Alliance is a public-private partnership that helps to vaccinate over half of the world's children.
- DFID is Gavi's biggest supporter, providing around a quarter of its funding.
- Gavi focuses on the 68 poorest countries in the world, funding vaccines that prevent some of the world's deadliest diseases for children, such as pneumonia, diarrhoea and measles.
- The Dulas Solar Direct Drive refrigerators do not need to use a battery, which have short shelf-lives. Fridges with battery packs would need replacing every two years in hot countries however the solar direct drive does not need to be replaced. Its freeze-free technology means there is also no chance of a vaccine freezing, which renders it unusable.
- Dulas have four offices in total across the UK, hiring around 80 staff. The Bognor Regis production facility is run by Polestar, which is 50% owned by Dulas and employs 19 staff.
- Dulas refrigerators are built to PQS specification, and all of the technology is produced under the strict audits necessary to maintain IS014001 and IS09001 standards. They are accredited by nine bodies and over the past 18 months, they have won or been shortlisted for 24 awards including the prestigious St. Andrews Prize for the Environment.
- The work DFID supports through Gavi and Dulas supports Global Goal
 3: Good Health and Well-being.

Speech: The Natural Laws of Brexit

Emma Howard Boyd, Chair of the Environment Agency

Westminster Energy, Environment and Transport Forum, Thursday, 17 January 2019

Good morning.

The tennis champion, Billie Jean King, said: "Pressure is a privilege".

Standing in front of you today, beginning a 10 minute speech about what will happen with Brexit...

...I'm not sure that pressure always feels like a privilege.

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But, I am lucky to represent the Environment Agency.

There, I see collaboration everyday as Government, NGOs, businesses, and local communities work together to enhance the natural environment, and manage the biggest political issue of our time: climate change.

Talking about that work - certainly is a privilege.

People react to pressure in different ways.

Around the world in 2019, we can see a kaleidoscope of human responses to political uncertainty.

Not all of it is as generous to our fellow citizens as we'd like — but pressure does strange things to people.

In these times, I would like environmentalists to set an example — by not rushing to judgement — on social media, or anywhere else — and working constructively with others to realise our shared, long term goals.

Like you - public servants are under pressure.

Despite a decade of austerity, my colleagues apply themselves with dedication and good humour. They create an organisation that is passionate about its purpose, and capable of much more besides.

In 2019, it is one of my priorities to make sure they are properly supported.

Their work to protect the country from the physical impacts of climate change protects people from severe weather, and makes the UK economy a safer place to invest in.

At the same time, our regulatory work provides ordinary people with a safeguard against unlawful business practices — (and, I am interested to read the details of the Labour Party's report on regulation this week, to see how their proposals could help this work).

"Environmental principles and governance" may sound legalistic, but this is not an academic exercise.

The consultation on the first Environment Bill in 23 years received 176,746 responses.

We think there's a lot to celebrate in it. We are ready to collaborate to turn the 25 Year Environment Plan's ambitions into action.

We look forward to working with the Office for Environmental Protection, as we work with the Committee on Climate Change — which plays a similar role.

We recognise outstanding questions about its resource and ultimate powers, but we think the Office's proposed approach — investigating complaints about environmental law and bringing about compliance through legal proceedings — could hold Government and public bodies to account effectively.

By putting the 25 Year Environment Plan on a statutory footing, the Bill takes a world-leading step forward for environmental law, just as the Climate Change Act did 10 years ago.

Environmental principles influence the substance of law and policy, and guide decision-makers about how to apply the law.

Without them, deregulatory duties from other Departments could override environmental protections from Defra.

The inclusion of principles — along with Environmental Improvement Plans — means we would like to see this Bill play a role in the long-term management of the environment, regardless of what happens in politics in the short-term.

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That said, there are risks.

Clause 4 of the Bill ensures that Ministers must "have regard to" the principles when making policy decisions.

However, those policy decisions risk being narrowly defined. We would like to be certain all Ministers will respect the principles.

Embedding them in our domestic framework of policy and law would ensure that law and policy makers respect environmental principles, and decision makers — including courts — may refer to them.

This Bill can help foster the collaborative working environment we aspire to.

The inclusion of a broad and transparent legal mechanism — to set environmental standards — would require business, government, regulators and NGO representatives to work together to establish what is achievable from an economic, social and environmental perspective.

Without it, standards could be set in Whitehall alone. But with it, wider civil society would be able to help safeguard environmental protection for generations to come.

We look forward to long term goals on specific ambitions in part two of the Bill.

For example:

Proposed legislation concerning the assessment and management of environmental risks — could help the country manage water better: by reducing damaging abstraction from rivers; by making improvements to long term planning for drainage and waste water; and by improving regional planning for water resources.

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On waste, modernising the regulatory framework could allow us to take even

more effective enforcement action against waste criminals.

We also think making businesses more accountable for the environmental impacts of their products would bring significant change — and we would welcome legislation making it easier for businesses and ordinary people to recycle.

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Legislation for mandatory biodiversity net gain would be welcome. We would like to see Environmental Net Gain as a long term ambition. The Bill has the flexibility to make this happen in the future.

Finally, speaking in my capacity as UK Commissioner to the Global Commission on Adaptation, I would like to see hard targets on climate change adaptation.

The Intergovernmental Panel on Climate Change report said we have 11 years to limit global temperature rise to 1.5° C above pre-industrial levels.

But, the World Economic Forum's Global Risks Report 2019 — prepared for Davos next week — says: "Global risks are intensifying but the collective will to tackle them appears to be lacking. Instead, divisions are hardening."

If we don't come together to deal with climate change, the impacts will tower over our present political disagreements. The accelerating physical risks mean environmental management and adaptation must be given more focus, alongside essential efforts to reduce emissions.

There is no point in building low carbon, energy efficient infrastructure that could be washed away in a flood or destroyed by heat.

This Environment Bill is a close relative of the Climate Change Act, and both are still relatively young.

By helping them to develop together — reducing emissions; making our country more resilient; and allowing continued prosperity — the UK can be a leader in a new and challenging global climate.

I began this speech by quoting a hero — Billie Jean King — but often it's not the "pressure" itself that is the "privilege".

The Environment Agency is a Category 1 responder, helping people in lifethreatening incidents.

Last year, Environment Agency colleagues were part of the response to the Skripal poisoning in Salisbury.

They said:

"We come to the aid of other Category 1 responders (like Police, Fire and Rescue) when they lead a major incident. They, in turn, come to ours."

"We all had to deal with a situation which was unprecedented whilst being unable to speak about it due to security restrictions."

"Many hadn't worked together before… We pulled together and relied on each other. People were approachable, caring, absolutely 100% there for the team. Sometimes it's the small things that help — like humour and good spirits. We became a close group and have met socially since."

"I'm a firm believer in staying positive: that's what saw us through."

The laws and policies discussed today are only two elements of a project that everyone in society has a stake in.

In a world where bitter disputes flair-up at the swipe of an i-phone, I would like us to apply the kind of inclusive and collaborative attitude displayed in Salisbury to our long-term environmental ambitions.

If Government, politicians, businesses, regulators, and NGOs, recognise that our environmental goals are more alike than not — and we can work together…

even if our methods may sometimes appear incommensurable

 \dots then — in years to come — we may come to look back at January 2019 \dots and say that the pressure was a privilege.

Thank you very much.

Speech: The Natural Laws of Brexit

The future for environmental principles and governance post EU Exit

<u>Statement to parliament: Statement on suspension of work on the Wylfa</u>

Newydd nuclear project

With permission, Mr. Speaker, I would like to make a statement following Hitachi's announcement that they intend to suspend development of the proposed Wylfa Newydd new nuclear project, as well as work related to Oldbury.

Mr. Speaker, the economics of the energy market have changed significantly in recent years. The cost of renewable technologies such as offshore wind has fallen dramatically, to the point where they now require very little public subsidy and will soon require none. We have also seen a strengthening in the pipeline of projects coming forward, meaning that renewable energy may now not just be cheap, but also readily available.

As a result of these developments over the last eight years we have a well-supplied electricity market. Our electricity margin forecast is currently over 11% for this winter — having grown for each of the last five years.

Whilst this is good news for consumers as we strive to reduce carbon emissions at the lowest cost, this positive trend has not been true when it comes to new nuclear. Across the world, a combination of factors including tighter safety regulations, have seen the cost of most new nuclear projects increase, as the cost of alternatives has fallen and the cost of construction has risen. This has made the challenge of attracting private finance into projects more difficult than ever, with investors favouring other technologies that are less capital-intensive upfront, quicker to build, and less exposed to cost overruns.

But as I made clear to the House in June, this government continues to believe that a diversity of energy sources is a good way and the best way of delivering secure supply at the lowest cost, and nuclear has an important role to play in our future energy mix. In my June Statement I therefore reaffirmed the government's commitment to nuclear. I also announced that we would be entering into negotiations with Hitachi over their project at Wylfa. Given the financing challenges facing new nuclear projects, I made clear to the House in June that we would be considering a new approach to supporting Wylfa that included the potential for significant direct investment from the government.

Mr. Speaker, while negotiations were ongoing, I am sure the House will understand that the details were commercially sensitive, but following Hitachi's announcement I can set out in more candid terms the support that the government was willing to offer in support of the project. Firstly, the government was willing to consider taking a one third equity stake in the project, alongside investment from Hitachi and Government of Japan agencies and other strategic partners. Secondly, the government was willing to consider providing all of the required debt financing to complete construction. Thirdly, the government agreed to consider providing a Contract for Difference to the project with a strike price expected to be no more £75 per megawatt hour.

I hope the House would agree that this is a significant and generous package of potential support that goes beyond what any government has been willing to consider in the past. Despite this potential investment, and strong support from the government of Japan, Hitachi have reached the view that the project still posed too great a commercial challenge, particularly given their desire to deconsolidate the project from their balance sheet and the likely level of return on their investment.

Mr, Speaker, the government continues to believe that nuclear has an important role to play, but critically it must represent good value for the taxpayer and the consumer. I believe the package of support that we were prepared to consider was the limit of what could be justified in this instance. I was not prepared to ask the taxpayer to take on a larger share of the equity, as that would have meant taxpayers taking on the majority of construction risk and the government becoming the largest shareholder with responsibility for the delivery of a nuclear project. I also could not justify a strike price above £75 per megawatt hour for this financing structure, given the declining costs of alternative technologies and the financial support and risk sharing already on offer from the government which was not available for Hinkley Point C.

I would like to reassure the House that Hitachi's decision to suspend the current negotiations on the project was reached amicably between all parties once it became clear that it was not possible to agree a way forward. Hitachi have made clear themselves that while they are suspending project development at this stage, they wish to continue discussions with the government on bringing forward new nuclear projects at both Wylfa and Oldbury and we intend to work closely with them in the weeks and months ahead. We will also continue to strengthen our long-standing partnership with the Government of Japan on a range of civil nuclear matters. And importantly, we will continue to champion the nuclear sector in North Wales, which is home to world-leading expertise in areas such as nuclear innovation and decommissioning, and offers ideal sites for deploying small modular reactors.

Mr Speaker, if new nuclear is to be successful in a more competitive energy market — which I very much believe it can be — it is clear that we need to consider a new approach to financing future projects, including those at Sizewell and Bradwell. As I initially set out in June, we are therefore reviewing the viability of a Regulated Asset Base model and assessing whether it can offer value for money for consumers and taxpayers. I can confirm to the House that we intend to publish our assessment of this method by the summer at the latest.

Through our nuclear sector deal, we are also exploring working with the sector to put the UK at the forefront of various forms of nuclear innovation. We are therefore exploring whether advanced nuclear technologies, such as small modular reactors, could be an important source of low carbon energy in the future and are considering a proposal from a UK Consortium led by Rolls Royce that would result in a significant joint investment.

Finally, I started this statement by outlining the challenges that the nuclear industry faces as the energy market changes. I will set out a new

approach to financing new nuclear as part of the planned Energy White Paper this summer. I know the future of the nuclear sector is of great interest to many Members of this House and I will ensure that Members across this House, and its Select Committee, have the opportunity to consider the proposals.

Mr. Speaker, I understand the disappointment the dedicated and expert staff at Wylfa and Oldbury will feel as a result of today's announcement by Hitachi. New commercial nuclear investments around the world over are experiencing the same challenges as new sources of power become cheaper and more abundant.

Nuclear has an important role to play as part of a diverse energy mix, but must be at a price that is fair to electricity bill payers and to taxpayers. We will work closely with Hitachi and the industry to ensure that we find the best means of financing these and other new nuclear projects. And our commitment to Anglesey — with nuclear, renewables, and the deep expertise that it has, a real island of energy — will not be changed by this decision. I will work with the member for Ynys Môn, the Welsh Government and the local community to ensure its renown is supported and strengthened, and I will do the same with my Honourable Friend the Member for Thornbury and Yate.

I would like to pay tribute to the staff of Horizon, Hitachi and to my own officials and those of in the Department of International Trade and the Government of Japan, who have spent many months doing their utmost to support a financing package. I know that they left no stone unturned in seeking a viable commercial model for this investment and I very much hope that their work and professionalism will lead to a successful partnership following this period of review.

I commend this statement to the House.

News story: Take on the biggest healthcare challenges: apply for funding

New healthcare technologies, products and processes could transform the life sciences sector and improve the lives of patients.

Through the <u>Biomedical Catalyst</u> — a partnership between Innovate UK and the <u>Medical Research Council</u> — there is up to £10 million available to UK businesses to:

- prevent disease and support proactive management of health conditions
- detect and diagnose disease earlier, leading to better patient outcomes
- develop tailored treatments that offer potential cures or change an

Hundreds of projects already funded

Since 2012, the Biomedical Catalyst has awarded over £250 million in grants to more than 300 projects.

Previous projects include <u>Calon Cardio</u> and <u>Swansea University</u>, which received £1.66 million for their artificial heart pump, the MiniVAD (ventricular assist device).

Biomedical Catalyst funding supported the evaluation of performance and safety data. It has helped to move the device one step closer to being used on patients in clinical trials — with the potential to slow the progression of heart failure and prolong the life of people waiting for heart transplants.

Any life science sector or discipline

Projects in the competition can be in any life science sector or discipline, including:

- medical technologies and devices
- stratified healthcare, which involves grouping patients based on risk of disease or response to therapy
- advanced therapies, such as gene and cell therapies
- digital health
- drug discovery
- diagnostics

There are 2 parts:

- feasibility studies and primer awards, for projects to test and provide proof of concept
- early and late stage awards for projects that are further along in their development

Feasibility and primer projects

There is up to £3 million for organisations to explore the commercial potential of an idea and carry out technical evaluations.

This could be through:

- reviewing research evidence and identifying possible applications
- assessing business opportunities
- assessing or protecting intellectual property
- validating initial concepts and pre-clinical work through experimental studies
- initial demonstration using in-vitro and in-vivo models, but not human clinical trials

- early-stage prototyping
- developing preliminary regulatory advice

Competition information

- the competition opens on 21 January 2019 and the deadline for applications is midday on 3 April 2019
- UK-registered small and medium-sized enterprises (SME) or research and technology organisations are eligible to lead a project
- total eligible costs must be between £50,000 and £1 million
- projects must start by 1 September 2019 and end by 31 March 2021. They should last between 3 and 18 months
- businesses could get up to 70% of their eligible costs

Early and late-stage projects

There is up to £7 million for early and late stage projects. These should have moved beyond initial research and are ready to be tested and evaluated in a clinical setting or other relevant environment.

Projects could look at:

- experimental evaluation at the laboratory scale
- evaluating proof of concept or safety through the use of in vitro and in vivo models
- exploring various production mechanisms
- prototyping ideas
- product development planning
- intellectual property protection
- demonstrating clinical utility and effectiveness
- demonstrating of safety and efficacy, such as through phase 1 and 2 clinical trials
- regulatory planning

Competition information

- the competition opens on 21 January 2019 and the deadline for applications is at midday on 3 April 2019
- UK-registered SME or research and technology organisations are eligible to lead a project
- applicants that pass the written stage will be invited to an interview panel on 10 May 2019 to present on their project
- projects must start by 1 September 2019 and end by 31 March 2021, lasting at least one year
- total eligible costs must be between £250,000 and £4 million
- businesses could get up to 70% of their eligible costs