Press release: £102 million to make UK prosper from the energy revolution

The development of a network of the best UK research and expertise in energy from right across the research disciplines, completes the launch of the fine from the energy revolution challenge, which is part of the government's modern Industrial Strategy.

The energy revolution research consortium will deliver a suite of strategic research projects that address industry- led challenges in the development of local, investable, consumer-centred energy approaches to create prosperous clean energy communities.

Chief Executive of <u>UK Research and Innovation</u>, Professor Sir Mark Walport said:

Clean and affordable energy is one of the biggest challenges of the 21st century and one that affects us all.

The energy revolution challenge will address this societal and environmental need by unlocking the potential of world-class research and innovation.

It will create the new commercial solutions that benefit consumers through reduced bills, that drive economic growth through new businesses and high-value jobs, and do this at a reduced environmental cost.

Through the <u>Industrial Strategy Challenge Fund</u>, we are tackling major industrial and societal challenges and supporting the UK to become an even stronger knowledge-driven economy.

The research consortium competition builds on a series of announcements in recent weeks that detail how the Industrial Strategy Challenge Fund is developing cutting-edge capabilities in local systems that deliver cleaner, cheaper and more resilient energy for consumers; which include:

Smart local energy systems demonstrators and designs

The fast-track creation of up to 3 practical local energy systems demonstrators and a range of whole-system design studies, which could be ready for new consumer energy systems in the 2020s.

The practical demonstrators will build supply chain capabilities, deliver positive changes for energy consumers, and inform future projects. The design studies will create a pipeline of investable projects for the future.

Innovation accelerator fund

The innovation accelerator fund will develop and commercialise smart local energy system products and services, and help UK business and researchers engage with the best international innovation opportunities.

Research and integration services

A world-leading, inter-disciplinary research programme will be commissioned to work alongside the <u>Energy Systems Catapult</u>. The programme will provide coordination and technical support to demonstration and design projects.

Rob Saunders, Interim Challenge Director, Prospering from the Energy Revolution, said:

This is an exciting time for energy innovations. The convergence of new technologies with artificial intelligence, big data, and the internet of things promises a new energy future.

This future will be one of lower carbon and more efficient energy supply, distribution and storage, giving consumers more control. This energy revolution — a crucial part of the Industrial Strategy — has the potential to unlock investment, create high-quality jobs all over the country and grow companies capable of exporting.

The prospering from the energy revolution challenge will bring together businesses working with the best research and expertise to transform the way energy is delivered and used.

Together they will develop and demonstrate new approaches to provide cleaner, cheaper and more resilient energy services. This includes providing energy in ways that consumers want by linking low-carbon power, heating and transport systems with energy storage and advanced IT to create intelligent, local energy systems and services.

Further funding to make up the rest of the challenge will be announced in future financial years.

The funding will be awarded competitively by UK Research and Innovation, the new organisation that brings together the UK research councils, Innovate UK and <u>Research England</u> into a single organisation to create the best environment for research and innovation to flourish.

Notes for editors

For more information, contact pressoffice@innovateuk.ukri.org or 07766 901150

UK Research and Innovation launches Energy Revolution Research

Consortium call

In collaboration with the Department for Business, Energy and Industrial Strategy and the Knowledge Transfer Network, UK Research and Innovation is hosting a consortium-building workshop in Birmingham on 9 and 10 July 2018.

More details here:

https://epsrc.ukri.org/newsevents/news/energyrevolutionresearchconsortium/

About the prospering from the energy revolution challenge

- smart systems can link energy supply, storage, and demand patterns across power, heating and transport to dramatically improve efficiency
- new smart energy systems will be able to take advantage of some of the \$2 trillion a year that will be invested in global energy infrastructure over the next decades
- the scope of this challenge is to provide solutions that integrate multiple technologies, infrastructures and market, finance and societal systems in real-world settings to create investable and scale-able models for the future
- this will create new high-value local jobs across the country, and export business associated with design, testing, finance, installation, and operation of new energy products, systems and services
- the novel approach in this programme is to undertake whole-system approaches at scale in real-world settings. Government support is needed to coordinate a very complex stakeholder and technology landscape
- the winning projects will bring together the latest low carbon power, transport and heating, with storage and smart systems using advanced IT to create intelligent local energy systems and services that cut bills, improve system efficiency, reduce the need for expensive new infrastructure and create high-value local jobs

About the Industrial Strategy

- the Industrial Strategy sets out the government's plan to help businesses create better, higher-paying jobs with investment in the skills, industries and infrastructure of the future
- the Industrial Strategy Challenge Fund is designed to ensure that research and innovation takes centre stage in the Industrial Strategy, bringing together the UK's world-leading research with business to meet the major industrial and societal challenges of our time

About UK Research and Innovation

- operating across the whole of the UK with a combined budget of more than £6 billion, UK Research and Innovation brings together the 7 Research Councils, Innovate UK and Research England
- we are an independent organisation with a strong voice for research and innovation, both to government and internationally, we are supported and challenged by an independent chair and board
- we are principally funded through the science budget by the Department for Business, Energy and Industrial Strategy

Speech: Acting within the core Security Council mandate to protect civilian populations affected by conflict

Thank you Minister Czaputowicz for convening this debate, and thank you also to the Secretary-General, to Director-General Daccord, and to Ms. Edwar for briefing the Council today. And I would in particular like to thank Miss Edwar for reminding us of the human suffering, the human tragedy of war, and I salute your determination to focus on people and not on stones.

Mr President, the core mandate of this Council is to maintain international peace and security. As recognised by this Council, large-scale human suffering can fuel conflict and threaten that security. Therefore, aside from the clear moral reasons for doing so, it is within its core mandate that this Council should act to protect civilian populations affected by conflict.

However, despite our many efforts, attacks on innocent civilians and civilian infrastructure continue to take place. The Secretary-General raised the bombings in Syria. The harrowing images from Eastern Ghouta of homes bombed to rubble, and of innocent civilians — many of them children — killed indiscriminately by the Syrian regime and its backers, should shock and appal all of us. Attacks on civilians and the preventing of humanitarian aid and medical supplies from reaching them, have been a weapon used by the regime.

In Ukraine, despite repeated calls by the European Union and others to immediately stop ceasefire violations around critical civilian infrastructure, notably the Donetsk water filtration station, the indiscriminate shelling continues. And the Education Cluster, co-led by UNICEF and Save the Children, reported that in Ukraine, parties to conflict damaged 42 schools in 2017, representing an increase from 26 schools the previous year.

These attacks damage the very foundations of the systems that are essential to sustain some of the most vulnerable societies throughout periods of conflict and reconstruction.

Mr President, sadly, around the world, healthcare workers are threatened and killed. Their facilities are looted and destroyed, affecting communities' access to healthcare for years to come. Schools also face attack, and the teachers and boys and girls within them are the target of recruitment, of sexual violence, and other abuses. Those who dedicate their lives to providing essential aid to civilians affected by conflict are also targeted. In South Sudan, more than 100 humanitarian workers have been killed since the conflict began five years ago.

We, the members of this Council, and we, the international community, must do more to protect civilians who are affected by conflict. The intentional targeting of civilians and civilian infrastructure is a war crime. International humanitarian law is our framework. As Yves Daccord said, it is our fundamental principle of humanity. We must ensure that it is enforced and perpetrators are held to account.

Let me highlight three areas where the protection of civilians could be improved through the application and enforcement of international humanitarian law.

Firstly, concrete steps must be taken to integrate the protections provided by international humanitarian law into national policies and programmes. We urge states to engage constructively in the inter-governmental Strengthening Respect for International Humanitarian Law Initiative which can help States share best practice and overcome challenges to the practical implementation of international humanitarian law. The UK has recently endorsed the Safe Schools Declaration, and in line with this, and international humanitarian law, we will continue to take all feasible measures to ensure the protection of schools, their teachers, and students — including particularly girls, whose access to education is disproportionately affected by attacks. And we urge others, likewise, to endorse the Declaration and take such action. To strengthen compliance with international humanitarian law by the United Kingdom, nationally, we ensure that all of our military personnel receive robust training throughout their careers. And we are proud to share our expertise with other countries to strengthen compliance, including through making more effective military justice systems.

Secondly, effective monitoring and reporting of compliance with international humanitarian, human rights, and refugee law in situations of conflict is critical to raising awareness of protection issues, and can provide the necessary evidence base for timely political and legal action. The UK strongly supports technological advancements for monitoring and reporting of violations, including the World Health Organisation's real-time Surveillance System of Attacks on Healthcare. We also support effective international criminal justice systems, which have an important role to play in bringing the perpetrators of atrocities to justice when States are either unable or unwilling to do so. As the Secretary-General said, we must end the climate of impunity.

And third, UN peacekeeping missions play a vital role in protecting civilians in some of the most fragile regions in the world where the application of international humanitarian law is critical. We welcome efforts to support the strengthening of human rights components in UN peacekeeping operations as well as the deployment of UN civilian human rights monitors to countries affected by conflict. Worryingly, we see at times the General Assembly seeking to weaken mandates agreed by this Council and its Fifth Committee by defunding human rights posts. This must stop. We welcome the efforts of the Secretary-General to mobilise all partners and stakeholders in support of more effective UN peacekeeping through his "Action for Peacekeeping" initiative. Improving the efficiency and effectiveness of peacekeeping missions — including through better long-term planning, the right troops and

equipment, the increased participation of women, and a clear framework for monitoring and evaluating performance within missions — will further improve their ability to protect civilians.

Mr. President, today, millions of innocent civilians are suffering due to appalling violations of international humanitarian law. This leads to enormous suffering and destroys the social fabric of communities, which in turn threatens peace and security. We must ensure that these violations are not ignored, that perpetrators are held to account, and that we make it ever more difficult in the future for would-be violators to get away with such actions unseen.

Thank you Mr President.

<u>Speech: Chancellor speech: CBI Annual</u> <u>Dinner 2018</u>

[Check against delivery]

Thank you, Paul.

And let me join you in commemorating those who lost their lives and those who were injured during the appalling attack in Manchester, a year ago today...

...our thoughts this evening are with the families and friends of those affected.

As ever it's a pleasure to speak to you tonight.

And what a week it has been.

The Royal Wedding; the FA Cup Final; and now the CBI dinner!

And I'm especially pleased to be here this evening to mark the end of Paul's three-year tenure at the helm.

I was doing a little research and stumbled across an FT interview with Paul in 2011.

When asked "which historical or fictional character do you most identify with?", Paul replied, with characteristic modesty: "Nelson Mandela".

[History will determine!]

Paul, congratulations on the achievements of your Presidency, and thank you for the leadership you have shown.

It was Nelson Mandela, reflecting on his first 100 days as President, who noted that "on occasion, strong language has been used to drive home a strongly held belief"...

...and he reassured his audience that this was a sign of "a robust, vibrant democracy, with broad consensus on the most important national questions".

Paul, I will welcome your speech tonight as a sign of our "robust, vibrant democracy"!

Because we are in broad agreement on the big questions facing our country and our economy.

We agree that:

We must rebuild a consensus for the liberal market economy as the best way to deliver future prosperity.

We must embrace digital technology, and ensure Britain is at the forefront of the technological revolution.

We must invest in skills and training — to ensure the next generation is prepared for the economy of the future.

We must build the world class infrastructure and invest in the R&D needed to ensure Britain stays ahead in the global race.

We must raise our productivity — and thus deliver higher wages for people up and down this country.

And yes, we must deliver a Brexit that prioritises jobs, growth, and prosperity.

And it is absolutely my belief that central to all of this, is listening to business, and believing in the power of business to deliver higher living standards, and spread greater prosperity.

I can promise you, Paul, business advice is a welcome input, not an "inconvenient truth"!

So I hear the concerns you have set out tonight about the Brexit challenge...

...but I remain confident.

And, by the way, when Donald Tusk says Brexit is the "saddest moment in Modern European history"...

...I assume he didn't see this year's Eurovision.

The PM has always had a vision for a close economic partnership between the UK and the EU...

...a partnership that protects supply chains, and established trade
relationships...

...that backs businesses, and safeguards jobs...

...and that promotes the values that we share across the continent of Europe.

We have made good progress:

In March we agreed on an implementation period...

...which allows "business as usual"...

...and ensures you only have to navigate one set of changes.

Focus has now moved on to our future economic partnership, and in particular the customs relationship.

I have listened to the four customs tests you have set out tonight...

...and we share your aspirations to minimise frictions and burdens...

...to avoid new barriers in Ireland...

...and to grow Britishexports.

But we do not agree that staying in the customs union is necessary to deliver them.

The UK has proposed two possible future customs models...

...both are "works in progress"...

...but we are confident that, building on these two models, we can develop a solution that will allow us to move forward while meeting your concerns, Paul.

And beyond customs, we will seek a comprehensive system of mutual recognition to ensure that, as now, products only need to undergo approvals in one country to show that they meet regulatory standards across Europe...

...and we will explore the terms on which the UK could maintain a relationship with the EU agencies, such as those for the chemicals, pharmaceutical, and aerospace industries...

...as the route to deliver such an outcome.

On services, we have the opportunity to establish a broader agreement than ever before...

...including continued recognition of professional qualifications, and a labour mobility framework that enables travel to provide services to clients in person.

And an opportunity to seek a bespoke partnership in financial services...

...that will enable the ongoing delivery of cross-border financial services in

both directions, while protecting financial stability and maintaining fair competition.

We made good progress in December and March, and I hope and expect we will make further progress at the upcoming June Council.

It is in the interests of both the UK and the EU to secure a mutually beneficial deal that will allow us to continue to have a close economic partnership...

...and to do so as soon as possible to give businesses the certainty they need.

I am confident that we will reach such a deal.

That is my most immediate priority as Chancellor.

But as we embark on a technological revolution that will transform our economy and our lives...

...my most important long-term challenge is to ensure that the UK continues to be at the forefront of that technological revolution, leading the world in innovation.

This is what our Modern Industrial Strategy is all about.

It isn't about picking winners...

...or propping up failed industries.

But about exploiting the synergy between the facilitating power of the state...

...and the energy of the private sector...

...to deliver the innovation that will secure Britain's future...

...within a market that is working properly and fairly.

Supporting entrepreneurship to ensure the industries of the future get off the ground...

...investing in research and development...

...ensuring that start-ups can access the finance they need to become "scaleups"...

...and, most importantly, creating an environment where innovation can flourish.

And we're putting our money where our mouth is...

...we've committed to the largest increase in public R&D spending in three decades, as part of our ambition to raise R&D investment across the economy to 2.4% of GDP.

We're investing £640 million of public money in artificial intelligence and over £1.7 billion in autonomous and ultra-low emission vehicles...

...and in the Budget last Autumn I launched a plan to unlock over £20 billion of patient capital, for the UK's most innovative firms to grow to scale.

But we won't be able to put the UK at the front of the pack unless we have infrastructure that is fit for the future.

And that is why infrastructure is at the heart of our plan.

In the 18th century, it was canals;

In the 19th, it was the railways, and in the 20th the arterial roads and then the motorways.

In the 21st century, fibre networks will be the enabling infrastructure that drives economic growth.

We've already connected more than 95% of the UK to superfast broadband.

But we must now take the next big leap forward.

Full-fibre networks are faster, more reliable, and cheaper to operate than their copper predecessors.

Over a million premises already have direct access to them...

...70% of those connected in the last 18 months alone.

But if we are to achieve our ambition of a truly high-speed economy, and keep up with our competitors, then we need a step change in our approach.

So I am now setting a new target to see full-fibre to the premises connections being available to 15 million premises, that's the majority of homes and businesses, by 2025.

This is ambitious...

...and it will require industry to connect more than 2 million additional premises a year for the next seven years.

We won't do that by government diktat.

We will do it by creating the conditions for the market to deliver...

...and we will use all the tools at the government's disposal to ensure that target is met...

...and we'll go further, by committing to finish the job — and deliver a nationwide full-fibre to the premises network by 2033.

Running both copper and fibre networks indefinitely will not benefit either the consumer or the industry...

...so we must start thinking now about that switchover and how to sharpen the incentives for industry to move customers away from copper and on to fibre.

And Matt Hancock, the DCMS Secretary, will set out our strategy to deliver these ambitious targets in the Future Telecoms Infrastructure Review, later this Summer.

The talent of the future

The digital industrial revolution and Artificial Intelligence will bring about a step-change in automation.

This, in turn, will have profound implications for jobs, and the way we work.

And if we want our people to embrace the digital economy, we must support them when they are affected by automation...

...and help them train and retrain into the new high quality jobs of the future.

Because just as the assembly line allowed Ford to triple the number of cars produced per worker...

...cut the price of a car in half...

...and increase employment eleven-fold...

So the digital industrial revolution will also create millions of new jobs, and huge increases in living standards...

...but that will not reassure those whose current jobs will be displaced.

So, between us in government and business we have a vital role in managing this transition;

In investing in skills and retraining;

In providing the reassurance our workforce will need.

We have made a start.

Through the Apprenticeship Levy, we are increasing the quality of apprenticeships, and the capacity of the system.

We've already seen a 25% increase in higher level apprenticeship starts.

But I recognise the new levy system presents some challenges...

...and we're listening to your concerns around flexibility, and will keep that issue under review to make sure the levy works as intended.

We're investing over £500 million a year in our new T-Level technical qualifications...

...and with the help of the CBI and the TUC we are establishing a new National Retraining Scheme...

...to help adults faced with the consequences of technological change to retrain throughout their working lives.

It's a groundbreaking collaboration and I'm delighted we were able to make it happen through the leadership of Paul and others here tonight.

But government cannot solve our nation's productivity challenge on its own.

Because it is not only about infrastructure and skills...

It is also about management.

Britain of course has many world-leading companies with globally competitive productivity...

...but there are also far too many that could be doing a lot better.

Tomorrow I will publish a call for evidence into why some businesses aren't keeping up and don't learn from the best…

...seeking ideas for how government and industry can work together to help more firms realise their potential by taking best practice.

And in parallel with the call for evidence I will announce with Greg Clark, the Business Secretary, further steps to boost firm-level productivity.

We'll invest £5.6 million to support smaller firms to adapt modern management practices and simple digital technologies, through two new pilot programmes delivered by Charlie Mayfield's Be the Business.

And we're extending our backing for the Made Smarter Digital Manufacturing strategy...

...led by Juergen Maier — and supported by the CBI.

Made Smarter will help to maintain our position as a global leader in the digital revolution...

...and so we'll provide £20 million for a pilot in the North West, to support SME manufacturers to adopt industrial digital technologies, such as robotics and data analytics.

Before I close, I want to touch on one further, important issue.

I have talked about the big opportunities ahead;

But there will be big challenges too — and challenges that go beyond the mere uptake of technology...

...to pose questions about economic governance and the organisation of society in the 21st century digital economy.

For those of us who believe in the demonstrated power of liberal market economics to deliver both prosperity and political freedom...

...this is a question about how this most resilient of economic models transforms itself in response to the challenges of technological and societal change...

...as it has done so many times before.

But if you are a politician [political content removed]

...your prescription will be very different.

For people of my generation — and looking around the room at many — though not all — of you, I see people who I think are of my generation...

...congratulations that you can still get out of an evening!

For people like us, who lived through the 1970s, the economic model [political content removed] is not a text book theory, but a vivid memory.

And for people in a small number of countries around the globe, it is a miserable reality today.

But not everyone in our society has shared that experience.

And some of a younger generation will be tempted by ideas that sound radical; maybe even "new" (even though they are rooted in a book written in the 1860s).

...because they do not feel the system is working for them.

Many of them have started their working lives at a difficult time for our country...

...emerging into the workforce as the financial crisis and its aftermath shook our system...

...and enduring a decade of recovery from it.

They look at their parents' and their grandparents' generations...

...at the home ownership levels, the defined benefit pensions, the traditional jobs...

...and they ask who or what decreed that so many of the things that previous generations took for granted, should be so much harder for them to obtain.

They are not looking for a hand-out...

...but they are looking for a reassurance that hard work will allow them, too, to achieve their aspirations for a better life for their kids.

And as we look forward to, and prepare for, the transformational impact that

technology will have on our economy and our society...

...we must answer their challenge.

We must articulate how we will refresh our economic model to respond to technologicial change...

...in competition policy...

...in taxation policy...

...in ensuring an equitable distribution of the proceeds of growth as we manage the impact of smart automation and artificial intelligence on the world of work...

...so that it speaks to their values...

...addresses their concerns...

...and unlocks the door to the achievement of their aspirations...

...with solutions, which are framed not by the stale ideologies of the past, but by the exciting potential of our future.

Solutions that build on, not undermine, the liberal market economy that is the bedrock, not only of our prosperity...

...but of our freedom too.

I have spoken tonight of our strategy for negotiating Brexit...

...and of our vision for post-Brexit Britain.

It is a vision of an open, dynamic, evolving, market economy...

Of a Britain whose firms are at the cutting edge of technology and innovation.

A Britain with infrastructure fit for the future...

...and workers equipped with the skills they need for the challenges that lie ahead.

A Britain where government and business work together to realise the potential of unlocking Britain's productivity puzzle...

...to deliver an economy that works for everyone.

That is our vision of the prize that lies within our grasp.

And I know we can count on British business to work with us to deliver it for the British people.

Thank you.

<u>Press release: Parliamentary Under Secretaries of State Appointments</u>

The Queen has been pleased to approve that David Rutley MP and Nigel Adams MP be appointed Parliamentary Under Secretaries of State at the Department for the Environment, Food and Rural Affairs and the Ministry of Housing, Communities and Local Government respectively.

Both roles are unpaid and are in addition to their current roles as Government Whips.

Nigel Adams MP has been appointed temporarily to provide support so Heather Wheeler MP can spend more time with her husband who has health issues.

David Rutley MP has been appointed temporarily whilst Thérèse Coffey MP recovers from a period of illness.

News story: Government announces new standards for fire and rescue services

Addressing the Local Government Association's Fire Commission yesterday, the Minister for Policing and the Fire Service, Nick Hurd, announced a new approach to improve professional standards for fire and rescue services across England.

While some professional standards currently exist for fire and rescue services, they are inconsistently applied and the government believes they can be expanded. A Fire Standards Board will be created to ensure standards are nationally coordinated to a high level across the sector.

The proposal was developed in conjunction with the National Fire Chiefs Council (NFCC), Local Government Association and other partners. This new board will be independent from government and supported by the NFCC's central programme office which will produce the standards, drawing on external expertise as required.

It will be for the board to determine its workplan but initial issues the Board could consider include:

- workforce issues like leadership and development
- the identification and mitigation of risks

 fire prevention and the approach to protecting the public from other emergencies

The board will also be responsible for agreeing priorities in response to the recently published Hackitt review, the Grenfell Tower inquiry, and other emerging issues facing fire and rescue services.

The Minister for Policing and the Fire Service Nick Hurd said:

We all recognise the bravery and dedication of our firefighters who work tirelessly every day to protect the communities they serve.

Creating a new Independent Board to oversee professional standards across England will support the continuous improvement of fire and rescue services and support them to become more professional than ever before.

This move is a key element of the government's ambitious fire reform programme which aims to improve the professionalism, effectiveness and accountability of fire and rescue services by:

- establishing an independent inspection regime Her Majesty's Inspectorate of Constabulary and Fire & Rescue Services (HMICFRS) — for fire and rescue
- encouraging employers to drive workforce reform, including increasing the diversity of the workforce
- bringing greater accountability to the work of local fire and rescue services by enabling Police and Crime Commissioners (PCCs) to take on responsibility for fire and rescue services where a strong local case is made
- supporting services to transform commercially with more efficient procurement and collaboration
- increasing the transparency of services with the publication of further information to allow the public to hold their service to account and the creation of a new national website in the summer