Press release: New deal with industry to secure UK civil nuclear future and drive down cost of energy for customers

- new £200 million Nuclear Sector Deal to secure the UK's diverse energy mix and drive down the costs of nuclear energy meaning cheaper energy bills for customers
- includes £32 million boost from government and industry to kick-start new advanced manufacturing programme including R&D investment to develop potential world-leading nuclear technologies like advanced modular reactors
- a commitment to increasing gender diversity with a target of 40% women working in the civil nuclear sector by 2030

An ambitious deal with the nuclear sector to ensure that nuclear energy continues to power the UK for years to come through major innovation, cutting-edge technology and ensuring a diverse and highly-skilled workforce, was announced today (28 June 2018) by the Business and Energy Secretary Greg Clark as part of the modern Industrial Strategy.

The deal, worth over £200 million, follows the government's recent announcement that it is to enter into negotiations with Hitachi over the Wylfa Newydd project. The deal will spearhead Britain's move towards cleaner economic growth, while promoting new opportunities in the sector including a focus on innovation to develop the technology and skills needed to maintain the UK's position as one of the world's leading nuclear countries.

It includes a strong commitment to increasing the diversity of the workforce so that more women can take advantage of new dedicated nuclear colleges and national schemes. Currently, the UK's nuclear industry faces a lack of gender diversity, with only 22% of the nuclear workforce being female, and of this, only 15% being female nuclear engineers. This deal will deliver up to 100,000 jobs overall in nuclear by 2021 and significantly more diverse with a target of 40% women working in the nuclear sector by 2030.

Business and Energy Secretary Greg Clark said:

> The UK is the home of civil nuclear technology and with this investment in innovation and our commitment to increasing diversity in an already highly-skilled workforce, I want to ensure we remain the world leader.
>
> Nuclear energy not only fuels our power supply, it fuels local jobs, wages, economic prosperity and drives UK innovation. This Sector Deal marks an important moment for the government and

> industry to work collectively to deliver the modern Industrial Strategy, drive clean growth and ensure civil nuclear remains an important part of the UK’s energy future.

Co-chair of the Nuclear Industry Council Lord Hutton said:

> The industry wants nuclear energy to remain competitive against other forms of low-carbon energy – which is why we are committed to working with government to reduce costs across the sector. Today’s funding boost will support this common goal; increasing the UK’s industrial capabilities as well as signalling our global leadership in nuclear to the rest of the world.

Alun Cairns, Secretary of State for Wales, said:

> It is particularly apt that we are launching the UK government’s nuclear strategy at Trawsfynydd. This site reflects both the past of our nuclear industry and an exciting future as the potential site for the new generation of small reactors, placing Wales at the centre of a UK arc of the nuclear industry.
>
> Trawsfynydd is ready to be transformed with little upgrade needed to the grid infrastructure. It’s in the right place with the right people and good links to leading academic research institutions in the nuclear sector. The kind of small reactor which could be sited in Trawsfynydd is set to usher in an era of cost-effective power with equipment put together off site and transported to locations like this for relatively easy assembly.
>
> I believe the UK government strategy announced today represents a road map which will drive innovation in the nuclear industry, create jobs and provide a significant boost to the local economy here in North Wales.

International Trade Secretary Dr Liam Fox MP said:

> British innovation is at the forefront of worldwide advancements in the nuclear sector, and there is clearly a demand for UK goods and services from around the world.
>
> This demand is exactly why we’re putting a strong emphasis on our ambition to secure £2 billion of contracts related to the sector by 2030, both at home and overseas.
>
> As an international economic department, the Department for International Trade will continue to support our innovative businesses who want to access overseas markets with measures such

> as our award-winning export credit agency, UK Export Finance, our network of global Trade Commissioners and GREAT.gov.uk.

Business and Industry Minister Richard Harrington said:

> Innovation will be crucial to the success or our nuclear industry. We want the UK to build on its strength in advanced manufacturing techniques to help position the UK at the forefront of the nuclear technologies of the future.

The Sector Deal will also see:

- the unlocking of growth opportunities in the nuclear supply chain through joint government and industry support for smaller companies in the UK to access higher value contracts and new markets
- the strengthening of pioneering research with the potential for global impact with a national fusion technology platform at the UK Atomic Energy Authority's Science Centre in Culham in Oxfordshire supported by government funding of £86 million.
- up to £44 million for research and development funding to support the development of advanced modular reactors
- a dynamic new partnership with Welsh Government to develop a £40 million thermal hydraulics facility in North Wales as part of the Nuclear Innovation Programme to support the design and development of advanced nuclear technologies
- a firm commitment from industry to reduce the cost of new nuclear build projects by 30% by 2030, and the cost of decommissioning old nuclear sites by 20% by 2030
- a new review to look at ways to accelerate the clean-up of nuclear 'legacy' sites (where there was previous nuclear activity) doing this safely whilst providing value for money to the taxpayer
- a significant reduction in the high costs associated with the sector through investment in new world-class technology, meaning nuclear energy can be produced in a more cost-effective way, and cheaper bills and peace of mind for energy customers
- the emerging findings of the Expert Finance Working Group's analysis of small modular reactors; the independent group's analysis suggest that the UK is well placed to develop first of a kind small reactor projects, and that the characteristics of small modular reactors could attract private investment.

Nuclear energy has been powering the UK for over 60 years, with a world-leading record for safety, and today generates around 20% of our electricity, helping us to move away from our reliance on dirty coal.

The UK will also be driving forward cutting-edge small and advanced modular reactors as part of this deal. Smaller reactors using trusted light-water technology coupled with advanced modular manufacturing offer the potential for lower-cost nuclear power stations complementing the industry's existing

plans for larger scale new nuclear power stations.

1. We have some really interesting bespoke case studies who are very willing to talk to media about their experiences working in the nuclear sector – including families working together in the industry, businesses involved in the local supply chains, and young EDF engineers. If you would like to arrange an interview please contact Marjorie Barnes, External Communications Manager, EDF on 07515 295488, or EDF Energy press office 01452 652233.

2. This is the fifth Sector Deal to be launched following the publication of the UK's landmark Industrial Strategy last November. The deal will play an important role in building a Britain fit for the future through a stronger economy, supporting all parts of the UK. Through this we will help businesses to create better, higher-paying jobs – setting a path for Britain to lead in the high-tech, highly-skilled industries of the future.

3. As a result of the deal, the nuclear industry will cut costs of new nuclear power stations by 30% by 2030, while cutting the cost of decommissioning old nuclear sites by up to a fifth – all essential to future-proofing this crucial part of the energy sector.

4. The most recent UK energy figures show that nuclear provides more than 20% of our low-carbon, reliable, baseload electricity.

5. According to recent research for the Nuclear Industry Association by Oxford Economics the nuclear industry contributes £12.4 billion to the UK economy and provides long-term employment for 87,000 people across the civil and defence sectors.

6. The Nuclear Sector Deal builds on the historical partnership between the government and industry that has helped the UK become one of the leading nuclear countries in the world. The future success of the industry is central to achieving the Clean Growth Grand Challenge set out in the Industrial Strategy; to maximise the advantages for UK industries of the global shift to cleaner forms of economic growth. The UK nuclear sector, with its historical strength and skilled workforce across the country, is extremely well-placed to capture this opportunity.

7. Small modular reactors (SMRs) are part of the advanced nuclear technology sector which covers a range of new innovations under development. SMRs are smaller than conventional nuclear power station reactors and are designed so that much of the plant can be built in a factory and transported to site for construction. They usually fall into 2 categories – either water-cooled reactors similar to existing nuclear

power station reactors but on a smaller scale, or advanced modular reactors which use new cooling systems or fuels and potentially offer a reduction in costs. The UK government is providing more than £40 million in funding to encourage companies to provide detailed plans for reactors.

8. Find out more about the UK government's support for advanced nuclear technology.

9. Read Greg Clark's statement on Hitachi.

10. The breakdown of the £200 million funding is as follows:

Up to £56 million for R&D for advanced modular reactors

- up to £4 million in Phase 1 will support around 8 reactor vendors to carry out detailed technical and commercial feasibility studies; up to £40 million of further funding could then support 3 to 4 vendors to accelerate the development of their designs in Phase 2, subject to a value for money re-approval process with the Treasury
- up to a further £5 million may also be made available to regulators to support this
- up to £7 million of funding to regulators to build the capability and capacity needed to assess and license small and novel reactor designs, as announced in the Clean Growth Strategy

£86 million for a National Fusion Technology Platform at Culham in Oxfordshire

£32 million for an advanced manufacturing and construction programme

- up to £20 million (subject to a rigorous business case) from government
- initial commitment of £12 million from industry

£30 million for a new national supply chain programme

- up to £10 million from government (subject to business case)
- £20 million from industry (£10 million from reactor vendors, UK supply chain companies and overseas markets; and £10 million as contributions-in-kind)