

Priorities for Government.



Nuclear Industry Association

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THE NEXT PARLIAMENTARY TERM WILL BE A CRUCIAL PERIOD FOR THE UK'S NEED FOR SECURE AND LOW CARBON ELECTRICITY SOURCES TO REPLACE POWER STATIONS COMING TO THE END OF THEIR LIVES; TO SECURE GROWTH AND LONG-LASTING ECONOMIC BENEFIT IN ALL PARTS OF THE COUNTRY AND TO CREATE THE RIGHT FRAMEWORK FOR CO-OPERATION WITH OTHER COUNTRIES AS A STATE OUTSIDE THE EUROPEAN UNION.

The UK's civil nuclear sector employs more than 65,000 people across the country in a diverse range of highly skilled roles, with scientific, engineering and manufacturing expertise which is highly sought after internationally.

Our current nuclear fleet provides around 20% of our current electricity production and is key to delivering the UK's decarbonisation and energy security targets.

The first new build project for a generation is now under construction at Hinkley Point C, which will provide 7% of our electricity needs for 60 years. As well as providing power that is constantly available and with no carbon emissions, the economic impact in the south west is already being realised by local and national UK supply chain companies.

With other new build projects progressing, there is an opportunity to provide similar economic impetus during the course of the next Parliamentary term in both west Cumbria and North Wales. There are further potential opportunities in development of Small Modular Reactors (SMR), nuclear fusion and future generations of reactor design in the UK.

There has been continued significant progress in decommissioning at sites across the UK since the last election, and it is important the commitment to continuing to advance decommissioning is maintained. Providing focus for the supply chain, facilitating innovation and enabling our expertise to be exported to global markets all help maximise value from decommissioning activity.

A strong pipeline of skills will continue to be needed to deliver the breadth of work in existing operations, new build and decommissioning. Our research and development capacity will need to be developed in conjunction with skills.

WE HAVE OUTLINED SIX KEY AREAS FOR THE UK'S CIVIL NUCLEAR SECTOR WHICH AN INCOMING GOVERNMENT WILL NEED TO ADDRESS, IN CONJUNCTION WITH INDUSTRY, IF OUR POTENTIAL IS TO BE REALISED:

- **INVESTMENT STABILITY** Long term clarity on policy to enable investment
- **INDUSTRIAL STRATEGY AND SECTOR DEAL** A coherent future strategy for the nuclear sector
- **DECOMMISSIONING** Commit to a progressive decommissioning programme
- **SKILLS AND TRAINING** Encourage STEM careers and enable transition from other sectors
- **LEAVING EURATOM** Replicate arrangements so there is no cliff edge as the UK leaves the EU
- **FUTURE TECHNOLOGY** Support innovation and future generation of nuclear technology

The NIA and our member companies will continue to work constructively with the Government to deliver investment and jobs, build the supply chain in the UK and help the UK benefit from emerging international opportunities. By working with industry to deliver on these six key areas, the incoming Government will be able to maximise the economic, industrial and employment opportunities as we continue the transition to a lower carbon power sector for the future.

TOM GREATREX, CHIEF EXECUTIVE, NIA



Investment Stability.

TO DELIVER INVESTMENT STABILITY IN THE ENERGY MARKET FOR DECADES TO COME, THE GOVERNMENT WILL NEED TO:

Maintain a policy framework for investment

The UK needs to secure more than £130 billion of investment in new energy capacity in the coming decades. To deliver this, companies need consistency, certainty and stability in order to commit the millions of pounds required to upgrade electricity infrastructure and deliver a secure low carbon energy future for Britain.

Maintain the pipeline of new build infrastructure

The next Government must maintain the momentum on new build projects, to deliver certainty to investors as well as avoiding delay in any future investments. This means continuing the Government's EMR framework, and the Carbon Price Floor arrangements. To keep costs down the Government should consider approaches that ensure risks are allocated appropriately for key national infrastructure projects.

Support nuclear Research and Development (R&D)

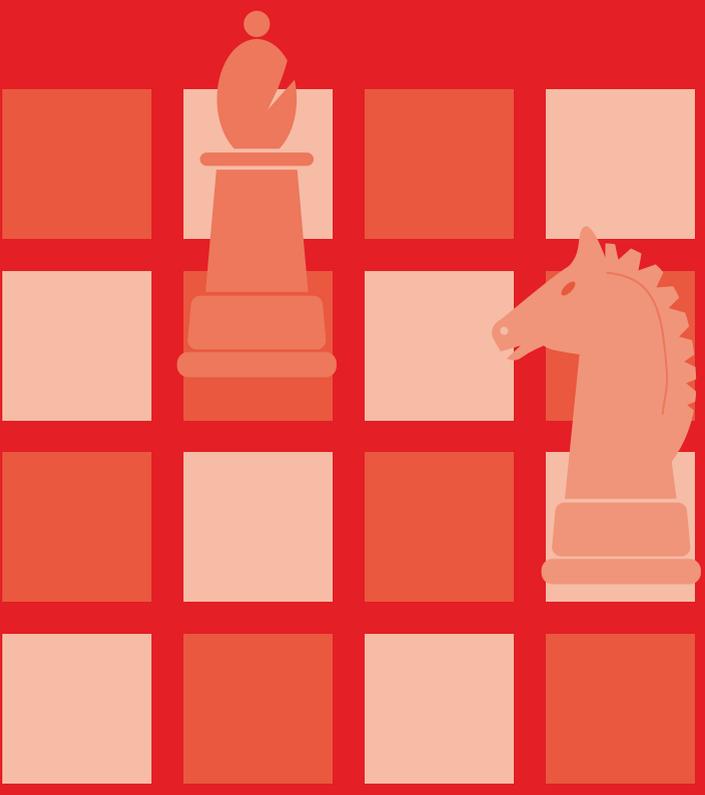
The Government has previously committed to spend £250 million over five years on nuclear R&D. It should maintain this commitment and implement the recommendations of the Nuclear Innovation and Research Advisory Board (NIRAB):¹

Ensure the exit from Euratom does not damage investment stability

Investment for new nuclear projects will only be forthcoming if there is continuing confidence in the stability of the UK's energy policy and regulatory regime. It is vital therefore that Euratom provisions are replicated to facilitate an orderly exit from Euratom.

IF THESE PROPOSALS ARE DELIVERED:

- There would be timely delivery of the first phase of the nuclear new build programme
- The UK will attract the necessary investment to deliver a decarbonised energy system
- UK industry will be well positioned to become leaders in emerging technologies including SMRs, Gen 4 and Fusion
- Transitional arrangements will be in place enabling the exit from Euratom to happen in an orderly way, allowing the UK nuclear industry to grow
- The UK will be seen as a global leader in R&D, attracting the brightest and the best to the UK and allowing technology for the next generation to develop in the UK



Industrial Strategy and Sector Deal.

TO MAINTAIN PROGRESS WITH THE CIVIL NUCLEAR INDUSTRY AND GUARANTEE CREATION OF A SECTOR DEAL, THE GOVERNMENT MUST:

Maintain support for supply chain development to enable growth of UK civil nuclear capability

Previous Governments have supported the growth of the UK nuclear supply chain through the creation of valuable programmes which have helped over 600 companies understand how they can get their business ready to bid for work on nuclear projects. This growth will enable the UK supply chain to increase the number of high value contracts it secures, across decommissioning and new build, as well as providing vital services to the existing nuclear fleet.

Support the improvement of local infrastructure to improve the deliverability of nuclear new build projects

The Government should consider prioritising communities hosting large infrastructure projects, such as nuclear plants, for additional local infrastructure investment. Associated infrastructure, including enhanced road, rail and sea links, are an important aspect of large projects and could be co-ordinated in a long term regional approach.

Build up local and regional support and encourage a co-ordinated approach across all sectors

A coherent and holistic approach must be taken to local development to ensure the right infrastructure is in place to meet local growth priorities.

Ensure skills are in the right place for cross-sector delivery of nationally significant infrastructure projects

There are a number of large scale infrastructure projects in prospect - such as the nuclear new build and naval submarine programmes, as well as other energy infrastructure and transport construction projects – which will all compete for scarce skills and resources. Government should support co-ordination between industries in identifying requirements to help overcome this problem.

IF THESE PROPOSALS ARE DELIVERED:

- The UK supply chain will be able to develop and increase its capability, allowing more UK companies to compete for high value contracts and opportunities for export – and enabling the UK to become a key player in the global nuclear market
- The industry and Government will be able to support the improvement of local infrastructure, vital to the regions – as well enabling the fast and efficient building of the nuclear new build programme
- The UK will be able to guarantee all nationally significant infrastructure projects have the right amount of resourcing to ensure they can be delivered on time



Decommissioning.

TO ENSURE THE COMPLETION OF THE UK'S DECOMMISSIONING PROGRAMME SAFELY, COST EFFECTIVELY AND SECURELY, GOVERNMENT MUST:

Maintain the Nuclear Decommissioning Authority (NDA) funding

Nuclear decommissioning is a multi-administration and multi-generational task that cannot be left to the future. Good progress is being made in reducing the risks and hazards at the NDA sites around the UK. To continue progress at sites across the country the Government should maintain the funding provided by the Department for Business, Energy and Industrial Strategy. Priority should continue to be given to high hazard areas of work – particularly on the Sellafield site.

Promote Research and Development to help create innovative technologies to accelerate the decommissioning process

Support companies to develop new technologies to accelerate decommissioning, benefiting the UK and the international decommissioning industry.

Guarantee long-term work programmes to safely manage UK waste

Maintain stability in decommissioning and the supply chain, whilst preparing for the defueling and decommissioning of the UK's AGR fleet, amongst other projects.

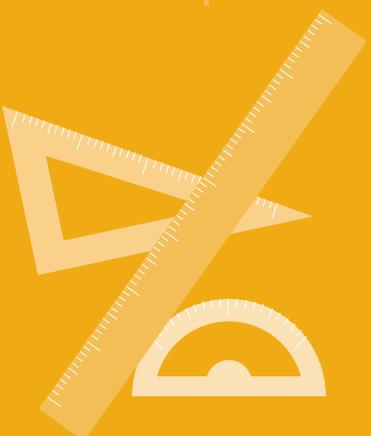
Support the decision to host a Geological Disposal Facility (GDF)

Having committed to develop a GDF, the Government needs to ensure progress is maintained, keeping to current timelines including providing communities with information in a timely manner.

IF THESE PROPOSALS ARE DELIVERED:

- There would be cost-effective decommissioning of Europe's most complex nuclear site – Sellafield
- UK supply chain companies will continue to invest in their businesses to provide goods and services for the UK and international decommissioning market
- Preparation for moving Magnox sites into Care and Maintenance, ahead of final dismantling work, can take place
- The industry will be able to maintain and increase the current pace of decommissioning, safely, securely and cost effectively using technology and innovation to help to protect the public purse, allowing land to be released back to the public for re-development
- A site will have been chosen to host a Geological Disposal Facility, in collaboration with local communities, making significant investments to the host area

Skills and Training-



TO CREATE A SKILLED WORKFORCE TO SUCCESSFULLY DELIVER THE UK'S NUCLEAR, LOW CARBON ENERGY FUTURE, GOVERNMENT MUST:

Ensure more focus is placed on STEM subjects at a young age, through the national curriculum, to encourage students to study these important subjects

The Nuclear Skills Strategy Group's national workforce assessment projects a growth in total employment rising from 80,000 in 2015 to 110,000 in 2021. By encouraging young people to consider STEM subjects through the curriculum and careers guidance, the UK can begin to fill this gap.

Guarantee continued support to high skilled, high valued, apprenticeship schemes to encourage young people into the nuclear sector

Apprenticeships are a popular entry point for many in the nuclear sector, with companies such as Sellafield Ltd running extensive programmes. The next Government should commit to maintaining the programme and ensuring there is flexibility in the Apprenticeship Levy to ensure the wider supply chain benefits.

Ensure there is continued access to those skills not available in the UK from the EU and further afield

These should be a priority during negotiations over the UK's departure from the EU.

IF THESE PROPOSALS ARE DELIVERED:

- There will be an increased number of young people entering the nuclear industry, reducing the age profile and improving diversity, and creating a pipeline to help build and operate the new nuclear build programme
- The workforce will grow through apprenticeships for new build, decommissioning and existing operations – ensuring companies do not have to look overseas to deliver contracts or maintain our fleet of reactors
- The UK's skilled workforce will strengthen Britain's place amongst global leaders of nuclear power; promoting the UK's educational facilities, universities, apprenticeship programmes and R&D facilities as centres of excellence

Leaving Euratom.



TO AVOID DISRUPTION TO THE UK AND INTERNATIONAL NUCLEAR INDUSTRY POST BREXIT, THE GOVERNMENT WILL NEED TO:

Agree a replacement Voluntary Offer Agreement with the IAEA for a new UK safeguards regime

The UK needs to rework its safeguards relationship with the IAEA outside Euratom. If the reworked, long term compliance arrangements are not in place on exit, the UK must negotiate transitional arrangements that are acceptable to all parties to ensure business as usual.

Replace the Nuclear Co-operation Agreements (NCA) with key nuclear markets

Leaving the Euratom Treaty without alternative arrangements in place would have a dramatic impact on the nuclear industry, including on the UK's new build plans, existing operations and the waste and decommissioning sector which all depend, to some extent, on co-operation with nuclear states overseas.

Set out the process for the movement of people, services and goods

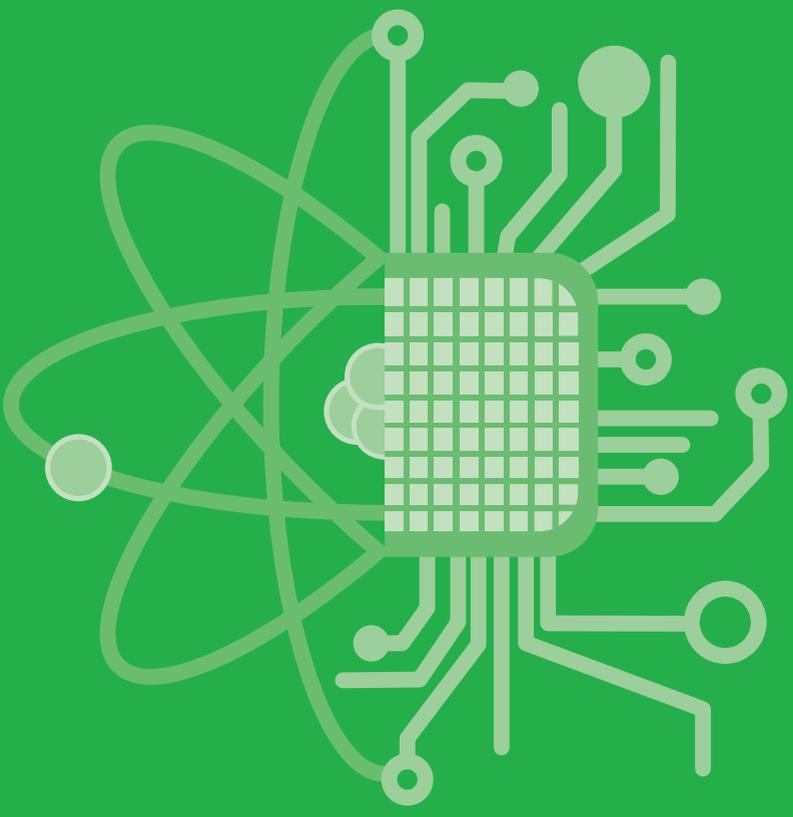
The Government needs to ensure nuclear industry employees in the UK and the European Union can continue to work without new barriers. It must also ensure the correct NCAs and safeguards are in place to allow the movement of services and goods across borders.

Agree a new funding arrangement for the UK's involvement in Fusion 4 Energy and wider European Union nuclear R&D programme

The UK and European Union will need to put in place arrangements to ensure international collaboration continues – specifically on programmes like ITER. In addition, the UK Government should negotiate where necessary to maintain access to world-leading research, and also ensure it is able to continue contributing to said research.

IF THESE PROPOSALS ARE DELIVERED:

- The UK nuclear industry will be able to continue working efficiently both nationally and internationally, following the withdrawal from the Euratom Treaty, without disruptions
- The UK nuclear industry will continue to have access to the highly skilled global work force
- UK companies will continue to have access to the growing global market, and enter more nuclear markets when new NCAs are signed
- UK companies will continue to contribute to industrial fusion and R&D programmes, and the UK can continue to benefit from international research



Future Technology.

TO DELIVER THE FUTURE GENERATION OF NEW NUCLEAR, THE GOVERNMENT WILL NEED TO:

Develop a UK programme for Small Modular Reactors (SMR)

The Government must make a decision about how it will proceed with its SMR Competition, to ensure investment stability and confidence is maintained in new technologies. A decision now will facilitate progress and provide the potential for deployment by 2030.

Invest in the development of Generation IV technology

Investment into future technologies such as Generation IV reactors would enhance the UK's position in international R&D programmes on new reactor designs and support the growth of the UK industry.

Make a final decision on its strategy for dealing with the UK's plutonium stockpile

A decision must be made early in the next Parliament so appropriate actions can be taken to address this legacy.

Agree to the appropriate funding for a strong independent regulator

The ONR is highly regarded both in the UK and internationally, and underpins the industry's activities both at home and overseas. The UK's nuclear new build programme and other programmes will put additional pressures on the ONR and it is important it has the resources to deal with them.

IF THESE PROPOSALS ARE DELIVERED:

- The UK could be a world leader in SMR technology, providing an important export opportunity for the UK industry
- The UK will be able to safely and securely manage its plutonium stockpile. Contributing to national security by placing the plutonium into an irreversibly safe and proliferation-resistant state whilst potentially providing low carbon energy to the grid will help to meet the UK carbon reduction targets and improve security of supply
- The UK will set an example in the international non-proliferation debate, creating a role model for others to follow
- The UK's nuclear supply chain will continue to strengthen and grow, providing further exportable potential

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