

# Considering the political impact on nuclear market decision making

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# Nuclear Overview – Future Certainty

## Role of Nuclear in BEIS Industrial Strategy & Clean Growth Strategy:

- *A clean energy pathway.*
- *Support of overall energy cost reduction.*
- *Increase the UK's industrial competitiveness.*
- *Development of a world class technical education system.*
- *£460 million for operations and R&D investment.*
- *UK nuclear job creation & supply-side contribution to the economy.*
- *100,000 future jobs in Cumbria, North Wales, Somerset Essex and Suffolk.*

Station	Commission Date	Decommission Date	Output in MW
Hunterston B	1976	2023	965
Hinkley Point B	1973	2023	955
Hartlepool	1983	2024	1180
Heysham 1	1983	2024	1155
Dungeness B	1983	2028	1050
Heysham 2	1988	2030	1230
Torness	1988	2030	1190
Sizewell B	1995	2055	1198
Hinkley Point C	2027	2063	3000
Wylfa Newydd	?	?	3000
Moorside	?	?	3400





# Politics has Shaped the Industry

- **Since 2006 there has been a Government U-turn on its stance towards nuclear:**
  - *Clean growth aims and more recently the phase-out of coal;*
  - *A response to wider policy and politics.*
- **Government does not offer upfront capital support:**
  - *Repercussions of poor decision making in 1970s nuclear;*
  - *Coalition Government set current policy; austerity & Lib Dem opposition to nuclear.*
- **Meaning foreign investment dominates the industry:**
  - *Foreign investors with nuclear knowledge and expertise, are attracted to the UK's commitment to nuclear,*
  - *But foreign equity carries greater risk – the costs of which are passed on to consumers;*
  - *Overall, UK PLC investment in to nuclear has been limited.*



# Contribution to Wider Government Objectives

## Skills Gap

Current mature workforce & increased future nuclear demand means there will be a skills gap without significant investment in personnel

## Procurement Capabilities

Further procurement capacity will be required to meet future nuclear demand. Ensuring this demand is met by UK PLC will reduce outsourcing and increase competitiveness

## Cost Reduction

LCOE is sensitive to CAPEX and OPEX.  
NAO: 1% capital cost reduction = 10% strike price reduction.

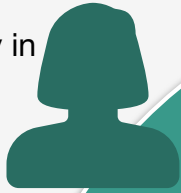
*Empower local communities & wider workforce  
Increase overall economic stability & industrial strength*



# Skills Gap Case Study

Embed gender diversity in the industry

**diversity**



STEM: engagement with schools, colleges and universities

**skills gap**



The Government and industry are working to build a skills base capable of meeting the demands of the new nuclear sector. There are substantial challenges to overcome. The nuclear workforce is ageing and attrition rates are high and growing as a result... the sector must recruit 8,600 new people a year

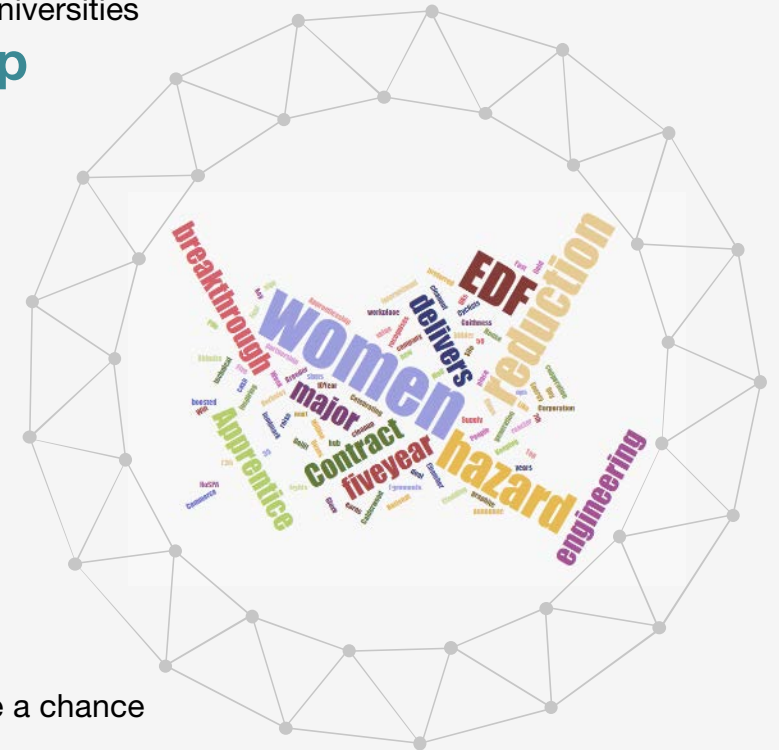
Bring people together who feel affected by inclusion issues, interconnected with other organisations

**diversity**



Give younger people a chance within the industry

**skills gap**



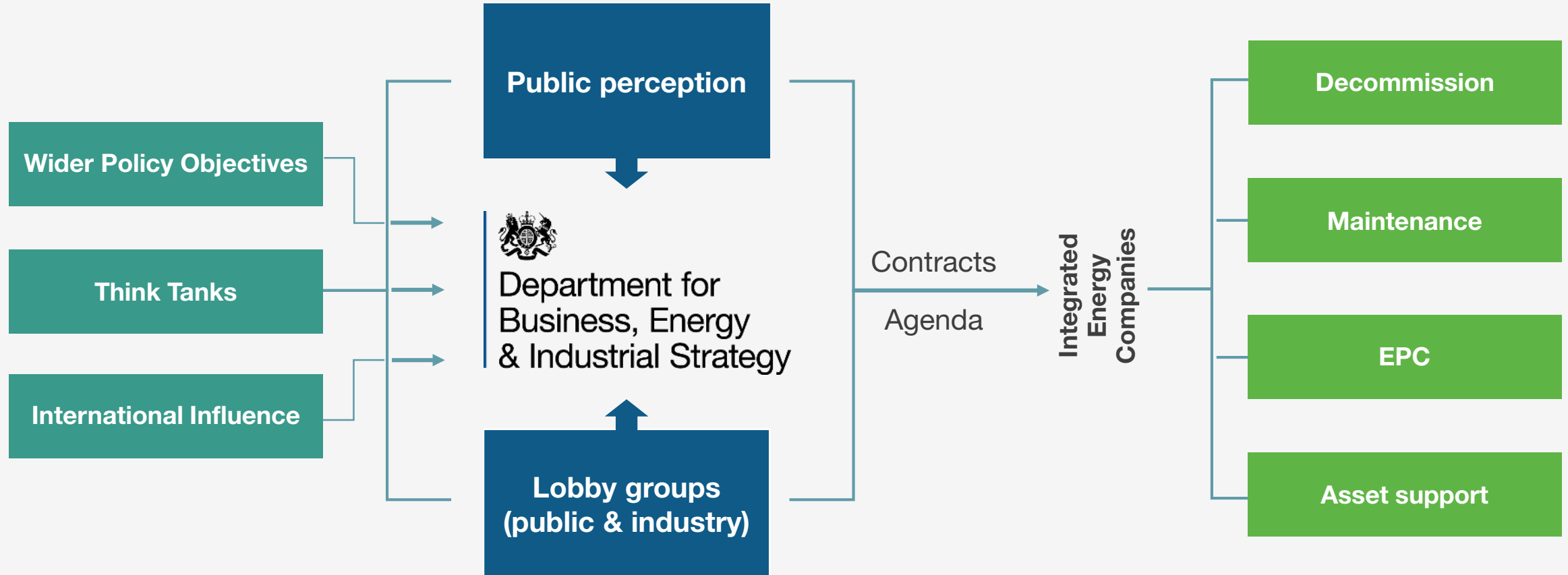


# Opportunities

- **Opportunities for growth within all stages of the supply chain:**
  - *operations, life extension and waste management;*
  - *new builds;*
  - *skills & supply chain;*
  - *R&D.*
- **Specific opportunities:**
  - *Light water reactors;*
  - *Safety and security;*
  - *Future design/build.*
- **Contribution to wider government objectives:**
  - *Structural change supporting jobs and regional empowerment;*
  - *Clean growth;*
  - *Supply-side growth;*
  - *Future export of skills and procurement;*
  - *Cost reductions.*



# Supply Chain Process



# Challenges

- *Communicate commercial importance to the supply chain*
- *Track, contribute and prepare for post-Brexit implications*
- *Understand and distinguish between UK and Scottish policy development*
- *Engage stakeholders within the industry:*
  - *BEIS officials*
  - *Brexit officials*
  - *Committee on Climate Change*
  - *Relevant parliament committees*
  - *Scottish Government*
  - *Wider group of stakeholders*

