GENERATE

Unlimited Opportunity in the East of England

NUCLEAR PROSPECTUS

The East of England is turning national nuclear ambition into delivery - powering clean energy, skilled jobs and sustained growth across the UK

CONTENTS

A PLACE OF FIRSTS

1st to harness North Sea gas

1st to deploy offshore wind at scale

1st to host full life cycle nuclear power

1st to see the sun rise

From operations, to new-build, to decommissioning - it started here.

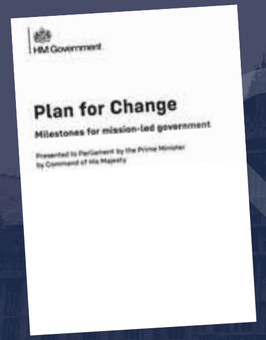
Welcome to the East of England, home to the UK's most complete nuclear and low-carbon energy cluster and a key partner to deliver the UK's national energy priorities.

Now we look to the future of nuclear.

The transition to low-carbon energy presents a defining opportunity. By delivering secure and affordable electricity, creating thousands of skilled jobs, and driving regional growth, the UK's nuclear regions have a central role in turning national ambition into delivery.

The East of England is unique, the only location globally with live nuclear decommissioning, an operational reactor, and a new build project, coupled with a multi-faceted energy portfolio.

SUPPORTING UK PRIORITIES


HM Government

Plan for Change

Milestones for mission-led government

Presented to Parliament by the Prime Minister by Command of His Majesty

The UK's nuclear renaissance gives the East of England a clear role in delivering the Government's Plan for Change-cutting energy costs for businesses and households while strengthening national energy security.

Plan for Change identifies nuclear, specifically Sizewell C and Small Modular Reactors, alongside offshore wind, solar and carbon capture and storage, as central to making Britain a Clean Energy Superpower. With these assets already concentrated in Norfolk, Suffolk and Essex, the region is ideally placed to support delivery at scale.

However, we can go much further. A Nuclear Operations & Maintenance (O&M) Centre of Excellence of national significance, within close proximity to Sizewell in Suffolk, will amplify this impact - delivering national priorities whilst creating high quality, long-term jobs in our coastal communities.

This prospectus sets out how, by building a national Nuclear O&M Centre of Excellence, headed up by a new body, Nuclear East, the East of England can provide practical, investable solutions to:

- Deliver the Clean Energy Superpower Mission
- Deliver the ambitions of Invest 2035
- Deliver the Clean Energy Jobs Plan

Invest 2035 prioritises clean energy and advanced manufacturing as drivers of growth.

A Nuclear O&M Centre of Excellence in Suffolk is a once-in-a-generation opportunity to unlock this potential, attracting inward investment, strengthening the UK's energy supply chain, and building a workforce capable of delivering low-carbon energy for domestic and international markets.

Norfolk, Suffolk and Essex have clean energy at the heart of their economic strategies, aligning directly with the Government's commitment to cluster-based growth. Together, this creates a powerful partnership-delivering long-term value for UK plc while securing lasting benefits for the East of England.


UK Government

THE UK'S MODERN INDUSTRIAL STRATEGY

CP 1451

GREAT

ENERGY A WAY OF LIFE

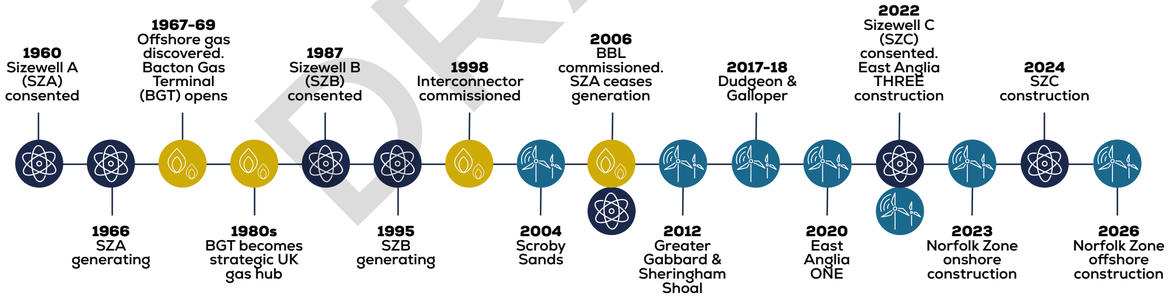
For more than 60 years, the East of England has powered the nation - from Sizewell A, one of the UK's first reactors, to Sizewell B, the country's only operating pressurised water reactor.

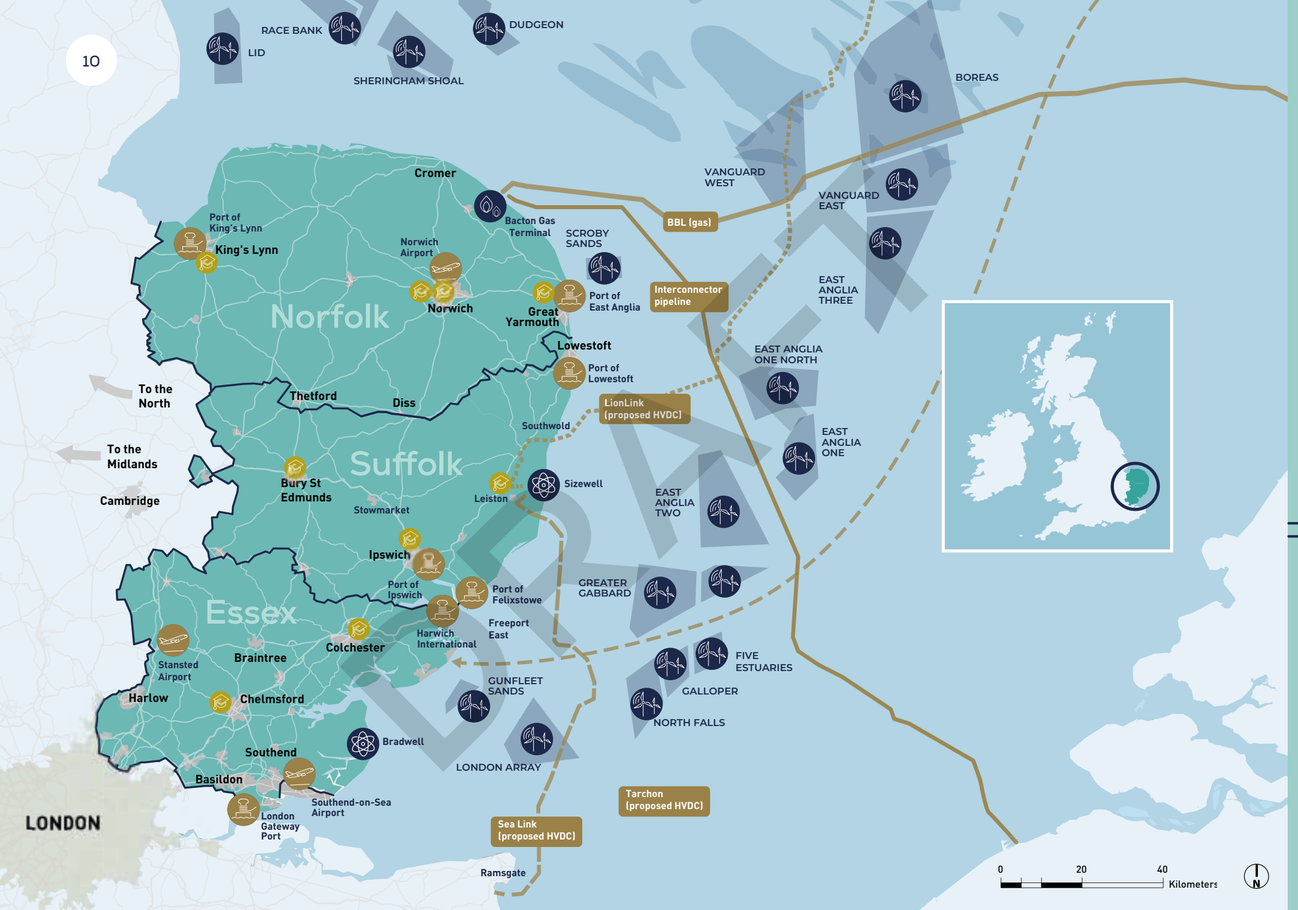
At the same time, Southern North Sea gas has underpinned UK energy security anchored around our region's offshore energy ports and the Bacton Gas Terminal - growing into a world-class supply chain which has diversified into offshore wind, carbon storage and hydrogen, ready to support nuclear new build, operations and decommissioning.

Off our coast sits one of Europe's largest offshore wind zones, backed by strategically positioned ports at Lowestoft, Great Yarmouth and Harwich - major hubs for construction, operations and maintenance.

Historically, our role in energy has been shaped by geography rather than strategic intent, leaving the region as an operational base rather than a centre of decision-making.

Nuclear provides the opportunity to reset this and establish the East of England as a permanent home where nuclear businesses can thrive.





30% UK gas

Bacton Gas Terminal

3.2GW new build

4,500km under sea pipelines

1.2GW operational

Future SMR locations

125+ gas installations

18 CO^2 storage licences

5GW installed

10GW consented

1,000+ turbines

PEOPLE AND SKILLS

Energy is woven into the identity of our people - powering livelihoods, anchoring our coastal communities, and providing security through times of change and challenge.

Now, this legacy becomes our greatest strength. The people of the East stand ready to lead the next chapter, re-energising the UK with clean, secure power and carrying our proud energy heritage into a bold new future.

Regional Skills Coordination

The East of England is responding to the Government's Clean Energy Jobs Plan by bringing together councils, colleges, employers and training providers across Norfolk, Suffolk and Essex to align skills provision with employer demand.

Coordination will target training investment, cut duplication and create clear pathways into high-value jobs across the region's energy, engineering and low carbon sectors.

Clean Energy Jobs

The Clean Energy Jobs Plan forecasts 860,000 clean energy jobs across the UK by 2030, with the East of England providing the fastest growth of any English region with over 60,000 people expected to be working in clean energy by the end of the decade.

This growth is driven by nationally significant infrastructure projects (NSIP) including Sizewell C, and in the future, Sizewell B life extension. Alongside the operations and maintenance of over 1,000 offshore wind turbines and a multi-gigawatt pipeline of new offshore wind in the Southern North Sea.

By focussing on nuclear and low carbon technology growth, developing specialist skills, and anchoring long-term employment in coastal communities, the East of England will play a central role in achieving Clean Energy Jobs Plan targets, supporting energy security and inclusive economic growth.

6.6m
population
of East of England

Energy & clean growth sectors
employ
34,600
people in Norfolk, Suffolk & Essex

60,000
people by 2030

1,500
Apprenticeships
will be created by **SZC** construction

Maximising investment in skills

Our region faces a skills challenge with attainment at levels 3 and 4 below the national average. Working with education, industry and government, clean energy investment will address this gap, building a workforce able to deliver major energy projects from nuclear to offshore wind, from Sizewell to Singapore.

Qualifications

	L4	L3	L2
Suffolk	39%	61%	86%
Essex	41%	65%	91%
Norfolk	38%	61%	87%
England	47%	67%	87%

Asset Skills Enhancement and Capability (ASEC)

A £7.8 million programme supporting workforce development for Sizewell C. Delivered in two phases, ASEC provides grants from £50,000 upwards to education providers, training organisations and employer partnerships aligned with Sizewell C workforce needs and regional skills priorities.

Sizewell C Skills Charter

The SZC Skills Charter, developed with ECITB, CITB, local councils, and industry, is the first of its kind in the UK and will ensure a highly skilled regional workforce.

Skills for Energy Taskforce

Led by the East of England Energy Group (EEEGR), this industry-wide initiative is bringing employers, education and local authorities together to align training with the needs of the sector.

The initiative is already strengthening employer links, opening up talent pathways and building a resilient, long-term energy workforce for the East of England.

CASE STUDY

College on the Coast

College on the Coast in Leiston, Suffolk, led by Suffolk New College and Sizewell C, will train the next generation of the region's energy workforce.

Focused on nuclear, renewables and engineering skills, it will work directly with employers and the Sizewell C project to create a strong pipeline of local talent, supporting the East of England's clean energy ambitions.

CASE STUDY

The Nucleus

The Nucleus at East Coast College, supported by Sizewell C, provides coordinated job search, application and interview support, linking local people to training and pathways into regional energy and infrastructure jobs.

The Nucleus complements the college's Energy Skills Centre and Civil Engineering and Construction Centre which deliver hands-on practical training aligned with Tier 1 contractors, building a skilled regional workforce for infrastructure and energy projects.

CASE STUDY

The Energy Readiness Programme

West Suffolk College is equipping learners and employers for Sizewell C and major infrastructure projects through site-aligned training, expanded energy courses and apprenticeships while supporting emerging energy technologies.

ECONOMIC IMPACT

The East of England's current and planned nuclear projects will generate 4.4GW of low-carbon baseload electricity, sufficient to meet the needs of 8.5 million UK households. Beyond energy security, a thriving nuclear sector can fuel prosperity, create jobs, investment, and long-term opportunities for communities across the East of England and the UK.

Sizewell C impact

22% Suffolk's GVA up by 2050

Oxford Economics forecast

Sizewell B

Since 1995 SZB has generated 270 TWh of zero carbon electricity, powering 2.5 million homes.

Employing 850 full time staff and contract partners, SZB brings £40 million into the local economy annually, and an extra £30m in an outage year, when the workforce grows by up to 2,000 additional people.

Multi-million-pound plans are afoot to extend the operational life of the plant by 20 years to 2055, presenting long term opportunities for the UK's nuclear supply chain.

SZB 99% uptime in 2025

Employs **850 people**

Sizewell C

SZC £4.4Bn spend in East of England

SZC is delivering considerable economic, social and environmental benefits to the East of England and the UK.

The project will support 70,000 jobs during construction, including 7,900 in Suffolk during 'peak' construction, and 1,500 Apprenticeships.

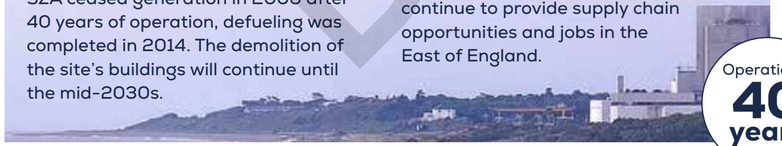
The project will invest £4.4bn in the East of England, £2.4bn in the North-East and £900m in Wales..

When operational, SZC will employ 900 permanent people and generate low carbon electricity for 60 years

Sizewell A

SZA ceased generation in 2006 after 40 years of operation, defueling was completed in 2014. The demolition of the site's buildings will continue until the mid-2030s.

Decommissioning activities and ongoing site care and maintenance phases continue to provide supply chain opportunities and jobs in the East of England.



Operational **40 years**

Advanced Nuclear Technologies

Essex, Norfolk and Suffolk are well positioned to host next-generation Small Modular Reactors (SMRs) and Advanced Modular Reactors (AMRs).

Sites across the region are being identified to integrate nuclear with emerging applications such as low carbon hydrogen, data centres and synthetic fuels production.

Aligned with our strategically located Freeports, SMR and AMR deployment could unlock billions in investment, reinforcing the East of England's role as a national hub for nuclear innovation, delivery and export.

SUPPLY CHAIN

The East of England is home to a well-established and diverse energy supply chain, built on decades of expertise across nuclear, wind energy, oil & gas and port services.

View the East of England's energy supply chain at:
www.generateenergysupplychain.co.uk

Building a nuclear cluster

The Sizewell C Supply Chain portal, managed by the Suffolk Chamber, has identified over 2,800 East of England businesses ready to provide services to the SZC project.

Our region's energy supply chain is well-placed to support a future outage programme based on the co-location of three operational reactors across SZB and SZC power stations by the mid 2030s.

As global investment in new nuclear accelerates, the East of England's strategic proximity to Europe positions it as a gateway for manufacturing, deployment and export of UK capabilities – anchoring a globally competitive nuclear cluster in the region.

Longer term opportunities linked to Advanced Nuclear Technologies in the UK and Europe, alongside Freeport incentives and infrastructure, further strengthen the East of England nuclear investment business case.

Suffolk Chamber of Commerce

2,800 regional companies
listed on Sizewell C Supply Chain Portal

EEEGR
EAST OF ENGLAND ENERGY GROUP

The East of England Energy Group (EEEGR) is the region's energy trade association, representing 225+ supply chain businesses, energy developers and Tier 1 contractors ranging from multi-national organisations to small and medium sized enterprises.

Freeports to Export

Leveraging the incentives and advantages of Freeport East and the Thames Freeport, the East of England can export capabilities in gigawatt scale new-build, nuclear O&M and decommissioning services.

In the longer term, SMR and AMR deployment, underpinned by Freeport incentives and enabling infrastructure will strengthen the resilience of the UK's nuclear supply chain.

A NATIONAL NUCLEAR O&M CENTRE OF EXCELLENCE

The Challenge

The UK must rapidly transition to a clean, secure, and affordable energy system. While renewables grow, baseload stability and system resilience will depend on a robust nuclear fleet. Yet, decades of underinvestment have weakened supply chains and depleted homegrown skills. Many coastal and rural communities, those often most critical to energy delivery, have seen limited benefit from national infrastructure projects.

Our Solution

The UK's nuclear fleet requires world-class operational, maintenance, and life-extension capabilities. We envision a National Nuclear O&M Centre of Excellence, located in the East of England, serving as the national hub for outage coordination, innovation, skills, and export development - centered around three operational reactors in Suffolk, the emergence of an SMR / AMR sector and ongoing decommissioning activities.

Initial Focus

The initial focus of the Nuclear O&M Centre of Excellence will be to work with regional and national stakeholders to identify key Tier 1 nuclear contractors and present a compelling case to them to strengthen their involvement in the region, working with them to establish a permanent presence here, forming the foundation of a nuclear industry cluster.

Outcome

The centre will anchor an integrated nuclear O&M cluster in the East of England, strengthening the UK's nuclear supply chain and delivering a permanent, highly skilled outage workforce. It will enhance national energy security, improve the resilience of the UK's nuclear fleet, and position the region as a global leader in O&M expertise - supporting the Clean Energy Mission, high-value job creation and long-term industrial growth.

KEY ELEMENTS

discuss
verb
to talk with another person or group
to exchange ideas and decide

A NATIONAL NUCLEAR O&M CENTRE OF EXCELLENCE

Outage and Maintenance Hub

A permanent base for outage contractors to accommodate planned shutdowns for maintenance and refuelling of operational reactors in Suffolk. Dedicated facilities for component storage, testing, refurbishment and a coordination centre for contractors and specialists (civil, mechanical, electrical, HVAC, process).

Workforce and Skills Development

Home to a highly skilled workforce trained in nuclear safety, outage management, and plant optimisation. Supported by access to training programmes, apprenticeships, higher education and professional development provided by university, college, and skills academy partners.

Innovation / R&D centre

Drawing on expertise from the Connected Innovation network, the High Value Manufacturing Catapult and BT's Adastral Park, the centre will drive innovation and R&D in robotics, AI, satellite applications and digital twins, supported by advanced testbeds and demonstration environments.

Specialised Infrastructure

The centre will feature advanced training simulators-such as virtual reactors, control room environments and emergency response facilities-alongside workshops and laboratories for equipment testing and prototyping.

GENERATE NUCLEAR PROSPECTUS

Safety and Regulatory Expertise

Supported by embedded expertise in nuclear regulation, compliance, and quality assurance, the centre will foster a strong culture of safety, reliability, and environmental stewardship, working closely with the Office for Nuclear Regulation (ONR) and international standards agencies.

Supply Chain Development

The centre will provide a focal point for the regional supply chain, encompassing nuclear-qualified SMEs and large contractors, supported by qualification programmes to help local firms enter and scale within the nuclear sector, positioning East of England based businesses to export their capabilities and secure contracts across Europe and globally.

Collaboration and Knowledge Transfer

Through Nuclear East, the centre will convene industry, government, regulators and academia to share best practice across operations, outages, life extension and decommissioning, while connecting to international centres of excellence to exchange knowledge and technology.

Future-Focused Development

The centre will have capacity to prepare for the growth in SMR and AMR technologies and other future opportunities to integrate with hydrogen, renewables, and storage as part of the region's wider energy cluster.

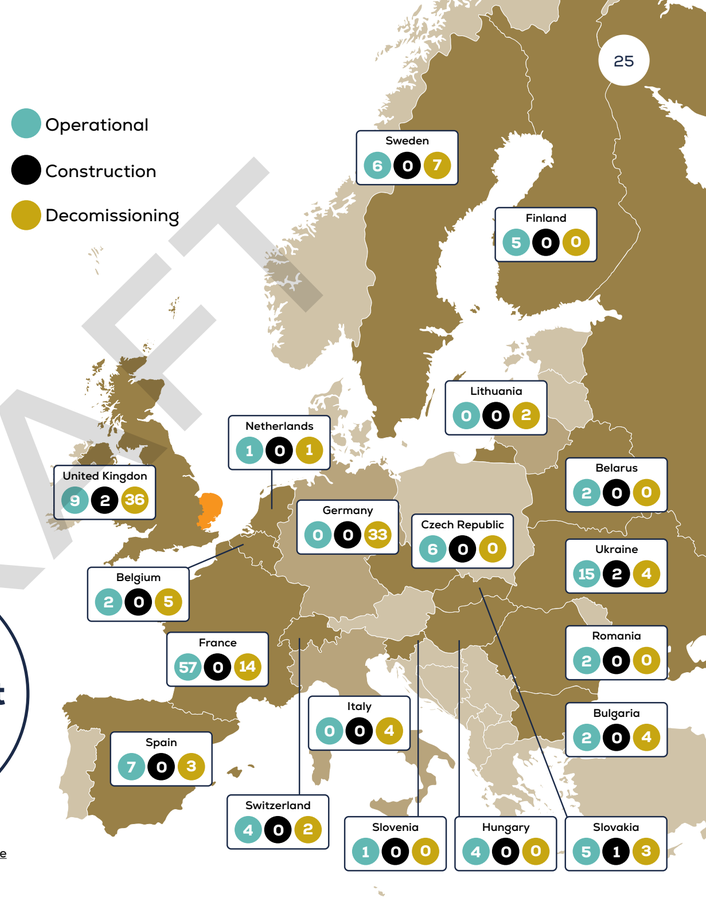
A EUROPEAN OPPORTUNITY

As European governments embrace nuclear as a cornerstone of a secure, low-carbon energy mix, the East of England's proximity and connectivity to Northern Europe will create a powerful export gateway for the UK's nuclear sector.

Expertise developed in Suffolk and the East of England across decommissioning, outage management, new-build delivery and SMR / AMR could be rapidly deployed into European markets, generating export revenues, strengthening the UK's nuclear supply chain, and sustaining high-value jobs and capability.

The East of England has the potential to support the UK to become a global hub for nuclear operations, maintenance and lifecycle services.

241Bn investment is needed over 25 years for EU nuclear plans.



Graphic adapted from www.euronuclear.org/glossary/nuclear-power-plants-in-europe
Source: IAEA PRIS Author: Mattia Baldoni, ENS

NUCLEAR EAST

A new organisation, Nuclear East, will position the East of England as a national and international centre of nuclear excellence, supporting the UK's energy transition, building regional and national economic growth.

An industry-led partnership bringing together business, government and academia to shape the future of the East of England's nuclear sector

Objectives

Convene
business leaders, policymakers and stakeholders to shape the region's nuclear future

Facilitate
engagement between private and public sectors on policy, investment, and regulatory needs

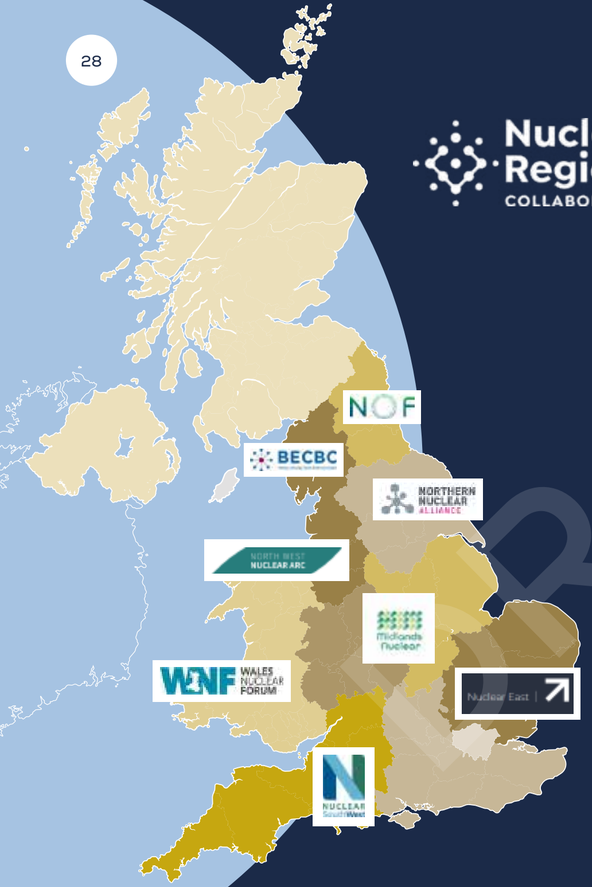
Research:
Developing in-depth studies to inform long-term policy and investment

Influence:
Provide a collective voice through white papers, strategic advocacy, and engagement with national policymakers

Delivery:
Identify and progress priority projects to strengthen the nuclear sector's presence in the East of England

Funding:
Attract funding for new projects, skills development and infrastructure expansion

Strategic alignment:
Coordinate growth powered by nuclear including data centres, sustainable fuels and energy intensive sectors



Nuclear Regions COLLABORATION

Nuclear East will ensure the East of England has a strong, coherent and influential voice within a national network of established regional nuclear organisations.

For the first time, there will be a single, recognised platform to bring focus, co-ordination and leadership to the East of England's nuclear ambitions.

Nuclear East will align industry, government and academia around a shared regional strategy - unlocking the East of England's full nuclear potential and ensuring it plays a leading role in the UK's nuclear future.

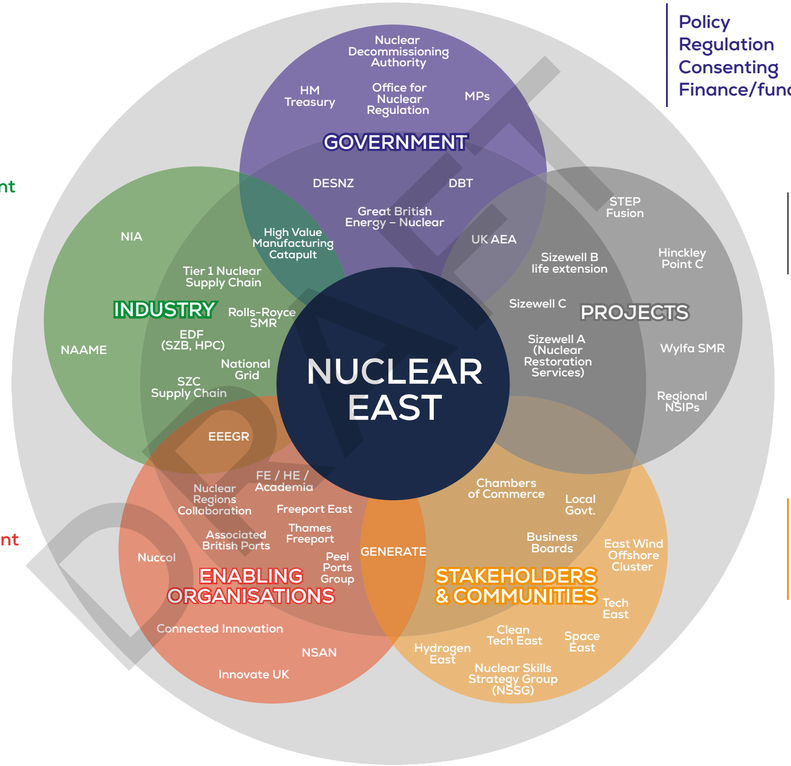
Represent industry
Advise
Influence
Supply chain engagement

Policy
Regulation
Consenting
Finance/funding

Development
Planning
Delivery

Skills development
Supply chain development
Economic regeneration
Infrastructure
(social, intellectual and physical)

Social license
Public acceptance
Social value
Accountability



By establishing a national Nuclear O&M Centre of Excellence and launching Nuclear East, the East of England will:

- **Deliver clean, secure and affordable electricity at scale, supporting energy security and the transition to a low carbon energy system**
- **Create thousands of skilled, well-paid jobs, driving productivity and long-term growth in the coastal communities of the East of England**
- **Crowd in private investment and strengthen domestic supply chains, supporting high-value manufacturing and the UK's industrial capability**
- **Build a nationally significant capability in nuclear operations, maintenance and innovation, reinforcing the UK's nuclear leadership and export potential**

The East of England is not only powering the nation **TODAY** – we are building the infrastructure, skills and strategic partnerships that will deliver the UK Government's Growth Mission, Clean Energy Jobs Plan and Clean Energy Superpower Mission, driving economic growth across the UK for decades to come.

GENERATE

Unlimited Opportunity in the East of England

Become part of the conversation, contact

info@generate-energy.co.uk

Find out more about energy sector investment opportunities in the East of England visit

www.generate-energy.co.uk

Explore the East of England's energy supply chain here

www.generateenergysupplychain.co.uk