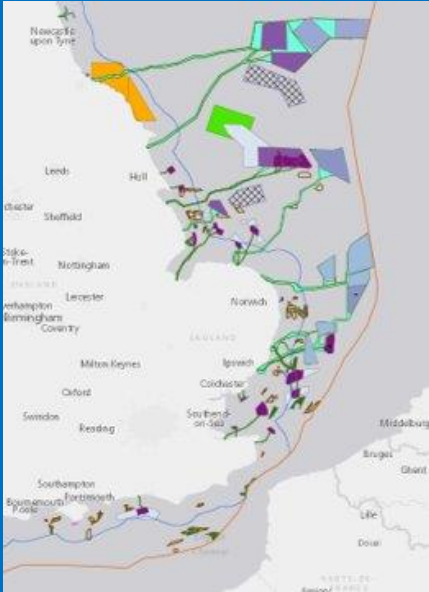


NSIP Centre of Excellence



Skills and NSIPs

Wednesday March 13th 2024

Funded by



Department for Levelling Up,
Housing & Communities



Agenda

- 09.35am** **Skills Development Through NSIPs: Unlocking Local Potential**
Johnathan Reynolds
Opergy
- 10.05am** **RWE's Approach to Collaborative and Impactful Skills and Employment Strategies**
Hannah Woodgate and Celia Anderson
RWE
- 10.25am** **Developing Skills Through The Great Grid Upgrade**
Emma Bennett and Fergus Hynd (National Grid Electricity Transmission)
Mike Humphrey, QUOD
- 10.45am** **Q&A**
- 11.15am** **Closing remarks**



Opergy
Group

Skills Development through NSIPs: Unlocking Local Potential

NSIP Centre of Excellence

March 2024

Introducing the Opergy Group



- Private limited group of companies, est. in 2019.
- 30+ staff with offices in East Anglia, Scotland, & China.
- Experts in clean energy: offshore wind, onshore wind, hydrogen, nuclear, solar, and more.
- We partner with businesses, governments, and communities to create and implement innovative plans, technologies, and sustainable growth strategies for a net zero future.

What we do:

- **Business and Industrial Strategy**
- **Market and Sector Research**
- **Financial & Investment Strategy**
- **Innovation to Market / Business Development Services**
- **GIS and Spatial Mapping**
- **Ports, Property & Infrastructure Development**
- **Carbon/GHG Assessment Services**
- **Cluster and Economic Development**
- **Net Zero Community Route maps**
- **People, Skills & Talent**



Opergy
Group



Opergy



Opergy
Scotland



Opergy
Net Zero



Opergy
Asia

NSIP developers we work with

Opergy act as:

- Advisors to UK and Scottish Governments
- Lead Assessors for CfD Supply Chain Plans (England, Wales, and Scotland)
- Partners and Suppliers to NSIP developers across Offshore Wind, Nuclear, Hydrogen, and Grid Infrastructure
- DCO support to Local Government and Planning Authorities



Department for
Energy Security
& Net Zero

RWE



nationalgrid

nationalgrid
ventures

Orsted



NSIPs and Skills Development

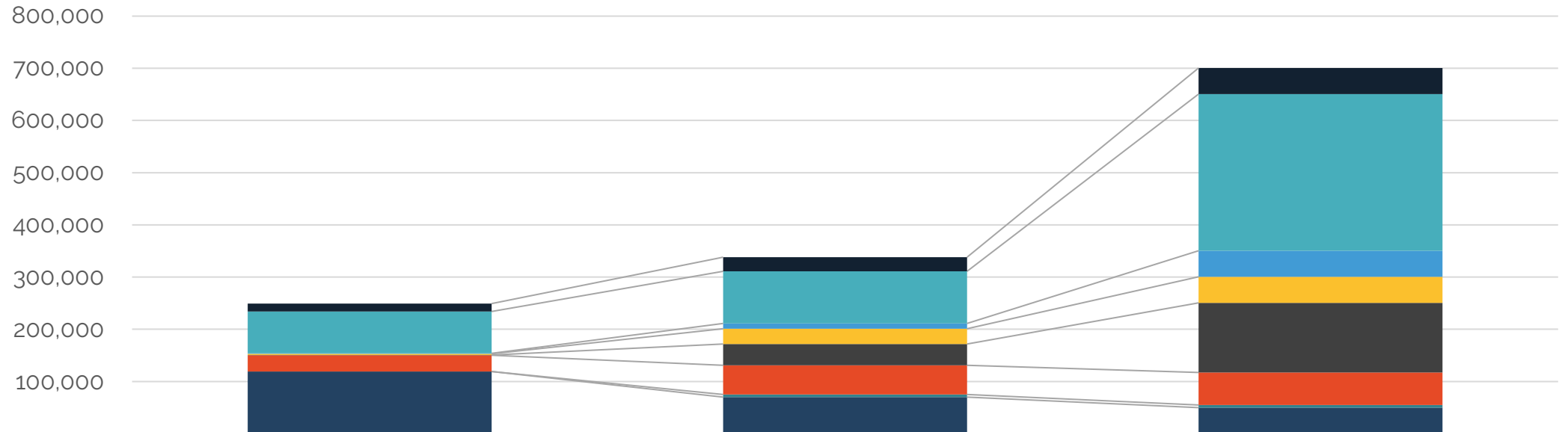
- National Significant Infrastructure Projects (NSIPs) are more than just large-scale investments in our physical landscape;
- With the right approach they are opportunities for economic and social transformation.
- NSIPs can significantly enhance local skill bases, boost long-term employment, and drive educational progression in our communities.
- NSIPs are a catalyst for investment, in places, in businesses, and skills.
- Skills cannot be delivered nationally. It will be local colleges, universities, and training providers that are key to engage and support.

The Current Skills Landscape

- Our local economies face a pressing challenge: a mismatch between existing skills and those required for the future, especially in sectors impacted by NSIPs.
- Recent evidence, including from LSIPs, indicates a significant gap in skilled labour in green skills, across construction, engineering, and clean energy sectors critical to NSIPs.
- The landscape is changing. LEPs are going. Skills Advisory Panels are gone. LSIPs didn't engage Major Projects effectively. Local Government collaboration is critical.
- This is often juxtaposed against local unemployment rates, often in coastal and rural communities, that underscore the untapped potential of our workforce.

2030-50 Energy Sector Forecasts

2024 to 2050 UK Jobs Estimates by Sector



	2024	2030 est.	2050 est.
■ Onshore Wind	15,000	27,000	50,000
■ Nuclear	80,000	100,000	300,000
■ CCUS	1,000	10,000	50,000
■ Hydrogen	2,500	29,250	50,000
■ Offshore Wind (floating)	500	41,000	133,000
■ Offshore Wind (fixed-bottom)	31,000	56,000	62,500
■ Offshore Electrification	100	5,000	5,000
■ Oil & Gas	119,000	70,000	50,000

NSIPs: Challenges and Opportunities

- The challenges are clear: we rapidly need to develop new skills, **and** upskill our workforce, to meet the demands of NSIPs, ensuring that training is both aligned with the specific needs of these projects, and wider regional needs.
- NSIPs present unparalleled opportunities for local development, with high-quality jobs and to help develop innovative education-industry partnerships.
- Competition for related skills is coming from several sources. The aggregated volume of new energy projects not classified as NSIPs, such as solar, battery storage, onshore wind, and hydrogen, is growing significantly.
- Decarbonisation of industry, transport, and homes is driving increased demand for 'green skills' in retrofit, heat pumps, domestic solar, electric vehicles and charging infrastructure, and more.
- We need to reframe NSIPs as dual disruptors during construction but create unprecedented opportunities for positive change. NSIPs are typically of a scale that can invest in the education and skills landscape on a level TCPA projects just cannot afford.
- **Remember, it's not just NSIP developers that present opportunities. Their supply chain is often where there is major investment prospects too!**

Successful Case Studies

Sizewell C, Suffolk

- Through SZC's DCO, £23m will be invested in education and skills infrastructure in the East during construction.
- Sizewell C has developed MOUs with all Further and Higher Education Institutes in Suffolk.
- Each MOU is specific to each college or university, identifying specific initiatives building on existing strengths; and investing in new capacity and capabilities aligned to the strategy for each partner.
- Initiatives range from investment in new facilities, to education curriculum, and research partnerships.

Siemens Gamesa, Hull

- As a direct result of Orsted's portfolio of offshore wind farms off the East Coast, Siemens Gamesa committed to building new factories for blades.
- Focused initially on serving Orsted's projects such as Hornsea 1 and 2, it is now supplying projects across the UK and Europe.
- An investment of more than £500m to date, and already on a third upgrade to support technology advancements.
- Over 1,000 people employed locally to support blade production. A skillset that did not exist in the Humber area previously, requiring new training facilities to support the factory.

Government and Stakeholder Roles

- Devolution, development of Combined Authorities, and integration of LEPs is changing the local landscape, and strengthening the role of Local Government bodies.
- Local governments are now uniquely positioned to bridge the gap between NSIPs, stimulating investment in economic growth and skills, and delivering a wide range of socio-economic and community benefits.
- However, more work is needed to engage key stakeholders across business, academic, and civic leaders, on understanding future skills needs and the challenges and opportunities that lie ahead:
 - **Local Focus** – Consider the role that local areas can play – Cities, Districts, Counties...
 - **Regional Collaboration** – working across regions, playing to regional strengths in education or supply chain capability. Note; many NSIPs will draw from a much wider supply chain network
 - **National Coordination** – NSIPs across the UK will have similar needs e.g. offshore wind, nuclear. Where are the opportunities for national coordination or collaboration, leveraging existing or wider investments.

Framework for Skills Development

- Local Government, working **with** NSIPs and wider project developers, need to build a framework for skills development.
- Investing in the right skills, at the right time. Too early, and we risk jobs not be available; too late, risks project delays or skills from elsewhere being accessed.
- A successful skills development framework involves a tailored approach:
 - underpinned by robust labour market analyses to identify current and future skill needs;
 - developing education, inspiration, and training programs that are accessible and relevant; and
 - establishing mechanisms for monitoring, feedback and future improvement.
- Ensuring that workforce development is both responsive and proactive, meeting the needs of both today's and tomorrow's industries.

The Road Ahead: Trends and Adaptations

We are navigating through an era of significant change, and the ability to anticipate and adapt to evolving skills needs and trends is crucial for local economies.

1. Technological Innovation:

- The rapid pace of digital transformation will need a workforce skilled in AI, robotics, and digital literacy.
- Encourage partnerships between education and tech companies to develop programs to satay ahead of technological advancements.

2. Green Energy Transition:

- With the global shift towards cleaner energy, there is a growing demand for skills in energy infrastructure technologies, energy efficiency, and business sustainability.
- Develop green skills training initiatives to prepare workers for roles in the burgeoning green economy.

3. The Importance of Soft Skills:

- In an ever-changing job market, soft skills such as adaptability, project management, problem-solving, and critical thinking become increasingly valuable.
- Integrate soft skills training into all learning programs to ensure a well-rounded workforce.
- Many NSIPs want to encourage adaptability through the construction workforce, and reskill or upskill to enable people to stay with projects in similar/different roles and projects progress.

4. Lifelong Learning and Innovation:

- The world is changing. Technology and Sustainability are key pillars for the future. Cultivating a culture of continuous learning within communities and organisations will be important.
- Skills and Innovation hubs are increasingly important, not just for developing creative solutions to industry challenges but also for stimulating adult learning, re-training opportunities, and second-or-third-career opportunities.

Thanks for listening.



Johnathan Reynolds

Managing Director, Operry Group

+44 (0) 7787 518643

Johnathan.Reynolds@operry.co.uk



Operry
Group



Opergy
Group

Creating Opportunity
with **Innovation**
and **Energy**.

HQ: Manor Farm Barns, Fox Road, Framingham Pigot, Norwich, NR14 7PZ
Scotland: Orchard Brae House, 30 Queensferry Road, Edinburgh, EH4 2HS

www.opergy.co.uk





RWE's approach to collaborative and impactful Skills and Employment Strategies

13 March 2024

Celia Anderson & Hannah Woodgate

Introductions

Celia Anderson

Celia Anderson is the Offshore Wind Skills Strategy lead for RWE across UK and Ireland. She has responsibility for, amongst other things, determining the strategic approach taken and subsequent delivery of Skills and Employment Strategies (including education) for all offshore wind projects. She has been involved at senior level in addressing energy industry's skills needs for many years including for the Offshore wind Industry Council and within central government



RWE

What we will be covering:

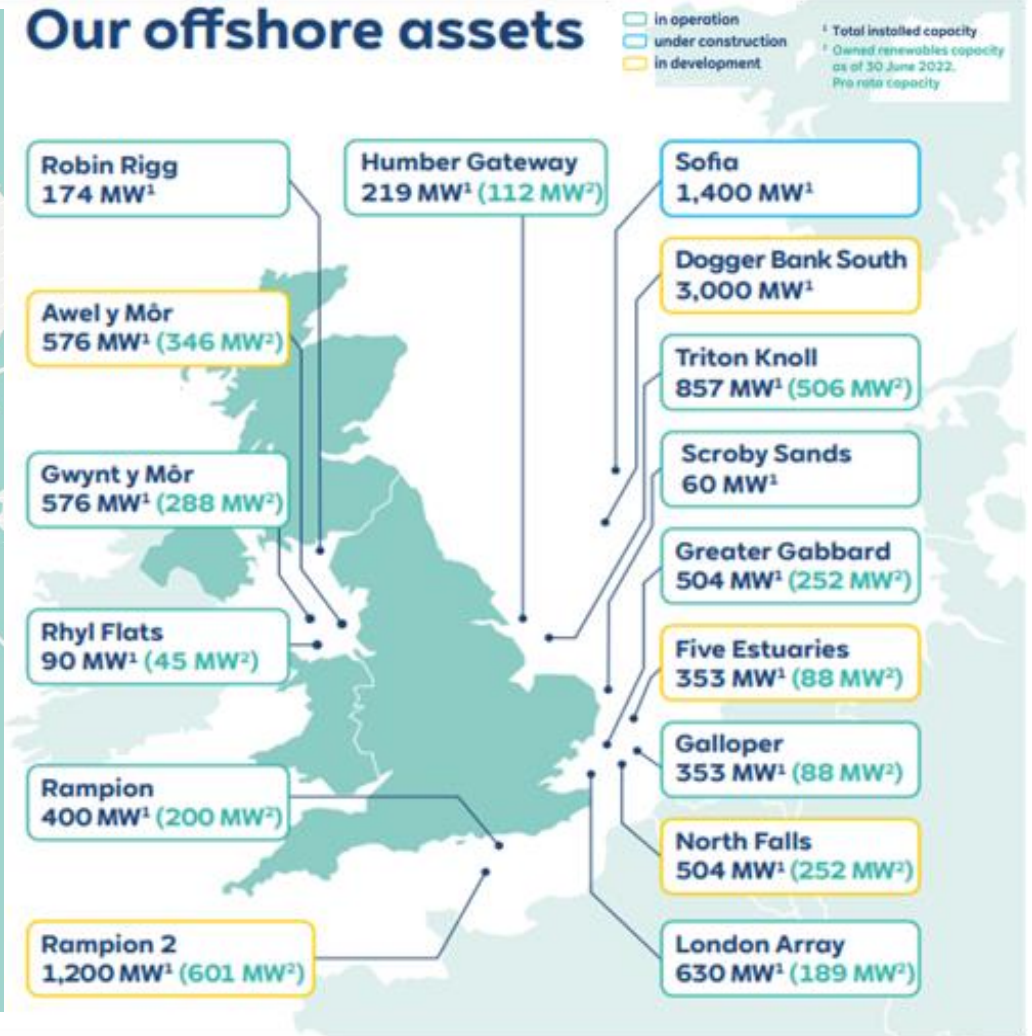
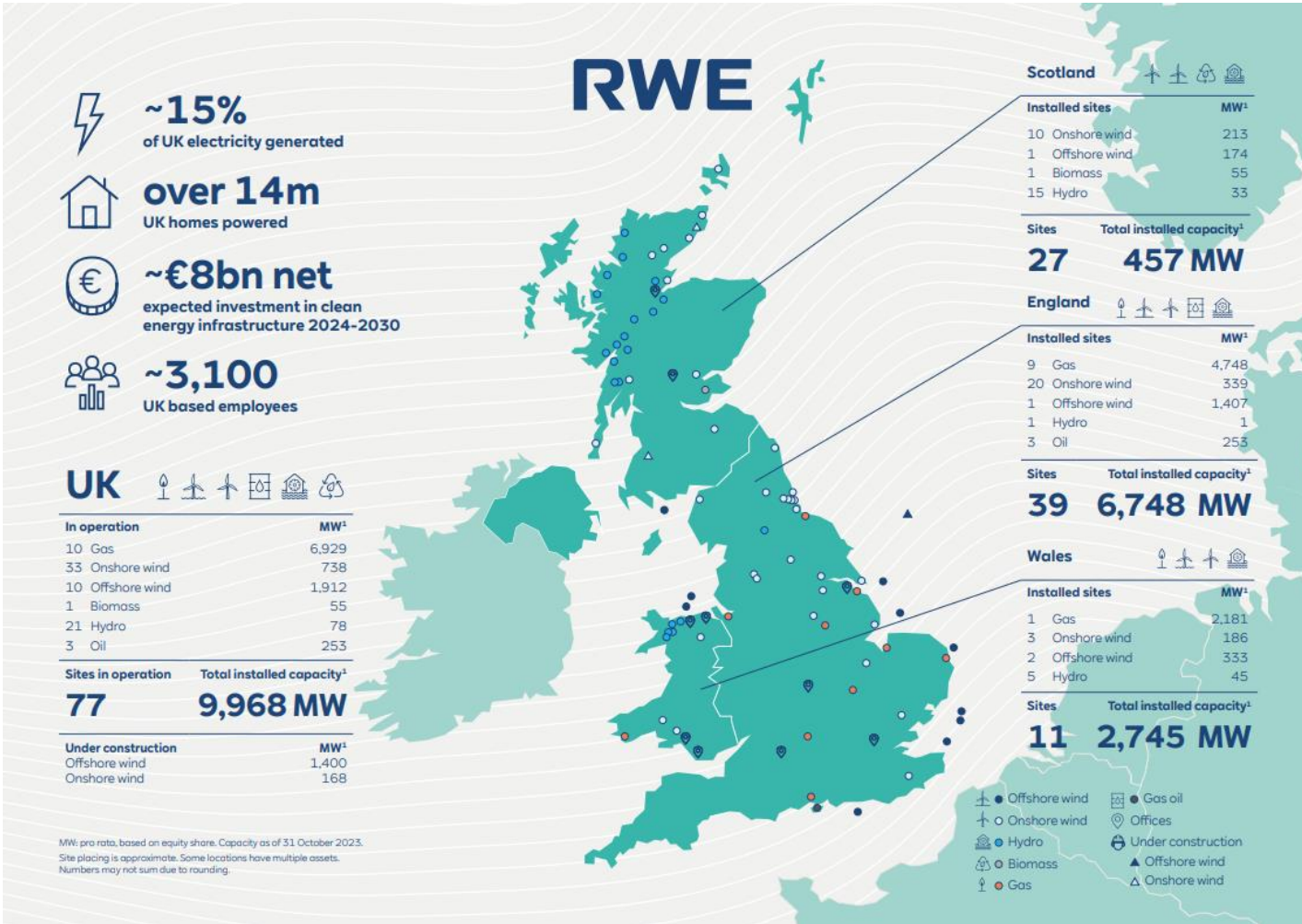
- RWE in the UK
- Our approach to skills
- Skills and Employment Strategies
- Rampion 2 case study
- What can you do to help us?

Hannah Woodgate

Hannah Woodgate joined RWE Renewables in January 2023 as Supply Chain Development Manager for Rampion 2 & Skills Strategy Manager UK&I. Prior to RWE, Hannah worked at Siemens Gamesa Renewable Energy as a Direct Supply Manager in the Hull wind turbine blade factory, where she initially started as an intern.



RWE in the UK - NSIPs

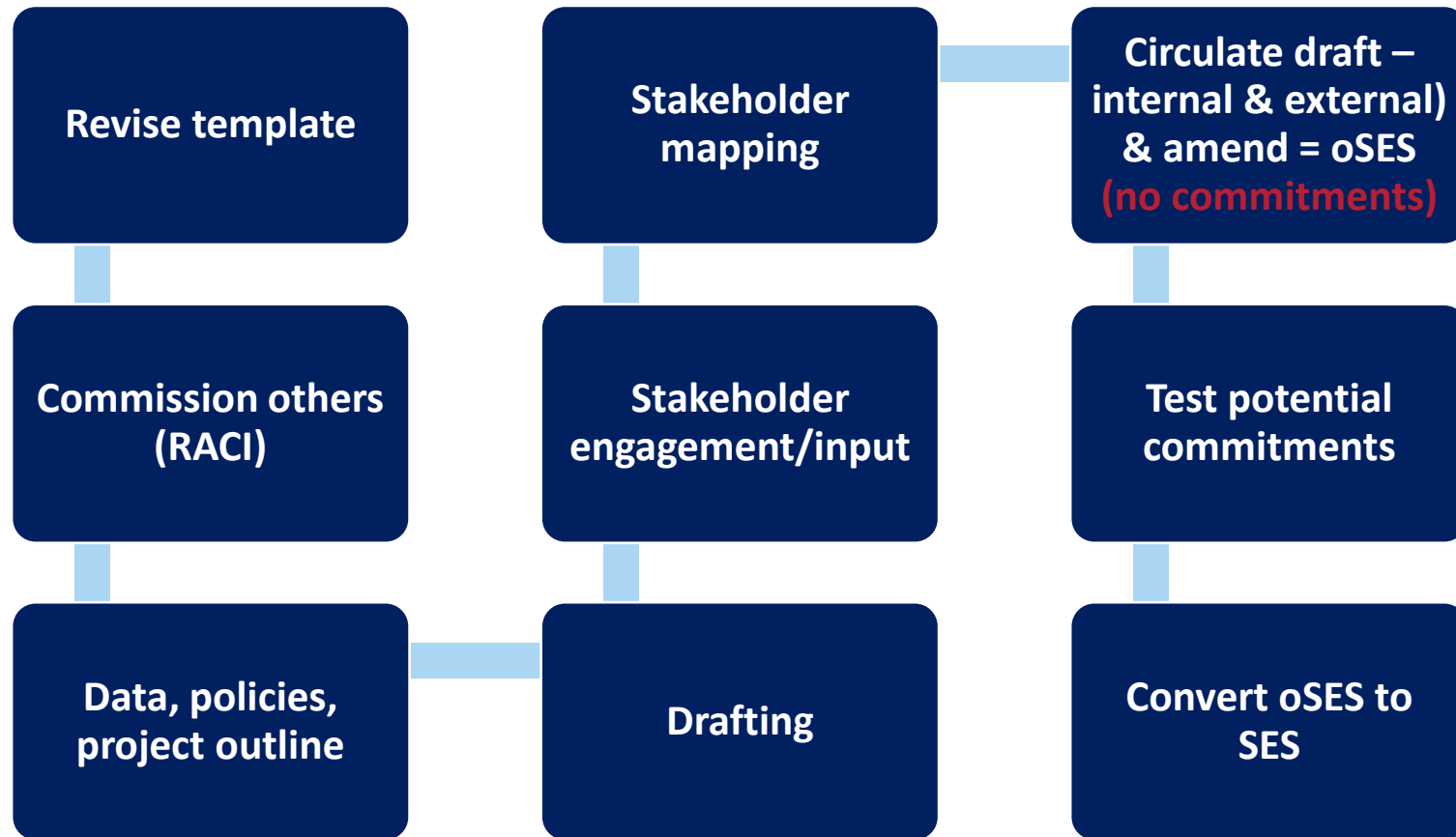


Skills key principles

Each proposal is to be assessed against the following

1. All engagement should be based on strong research whilst meeting needs of key stakeholders.
2. Engagement with education fits with Gatsby Benchmark requirements and the CDI Careers Development Framework
3. It should build on and does not duplicate or overlap with existing initiatives.
4. It will make best use of RWE resources; projects, existing assets (on and offshore) and people e.g., STEM Ambassadors, volunteers.
5. From the outset it should consider sustainability and legacy particularly as the project moves from construction to operational phases.
6. Where feasible, initiatives should be delivered in collaboration with others e.g. in the supply chain, other NSPs, key skills stakeholders.

Approach to Skills and Employment Strategies (oSES - >SES)



RWE Offshore Wind skills, education & employment approach

Supporting the whole career

- Primary education
- Secondary education
- Tertiary – (linking with innovation and R&D)
- Early stage careers – work experience, apprenticeships, traineeships/internships
- Upskilling/CPD of existing employees

Expanding the talent pool

- Unemployed, under-employed, employment poverty, economically inactive
- Raising aspirations
- Improving employability skills

Employment & training – supporting the supply chain

- Encouraging and supporting growth and employment in local supply chain companies
- Helping local SMEs to be visible to the employment market
- Promoting training & employment opportunities e.g. to local residents
- Supporting transition from other sectors – military, fossil fuel-based sectors etc
- Opportunities to collaborate with other developers, tier 1s, supply chain

Taking into account

- Levelling Up agenda, Just Transition (and Health in Coastal Communities) etc,
- Renew and reform: supporting learners' wellbeing and progression.
- Well-being of Future Generations
- Local policies and strategies

All through a Diversity & Inclusion lens incl.

- Gender
- Ethnicity
- Disability
- Social mobility
- Carers & carer leavers
- Etc

Other areas of work feeding into SES

Education
Strategy for
each project

Workforce
planning

Strategic
stakeholder
engagement

Working with
other NSIPs

Overview of report content (headings from the Awel y Môr project oSES, North Wales)

1 Introduction

- 1.1 Background
- 1.2 Purpose of this strategy
- 1.3 Project description
- 1.4 Demographics
 - 1.4.1 Population
 - 1.4.2 Employment
 - 1.4.3 Labour market indicators
 - 1.4.4 Community
- 1.5 Policy context
 - 1.5.1 Well-being of Future Generations (Wales)
 - 1.5.2 Green Jobs
 - 1.5.3 Other relevant policies and initiatives

2 Approach and Principles

- 2.1 Scope and aims
- 2.2 Principles
- 2.3 Industry Leadership

3 Stakeholder consultation

- 3.1 Stakeholders
- 3.2 Current consultation
- 3.3 Skills and Employment Strategy

4 Outline commitments

- 4.1 Objectives
 - 4.1.1 Approach to recruitment
 - 4.1.2 Education
 - 4.1.3 Apprenticeships
 - 4.1.4 Interns and Graduate Programmes
 - 4.1.5 Transition
 - 4.1.6 Unemployed, under-employed, economically inactive and those experiencing employment poverty
 - 4.1.7 Employee engagement
 - 4.1.8 Diversity

5 Implementation and Monitoring

6 Case studies

- 6.1 Offshore Wind Technician Apprenticeship Programme
- 6.2 Technician Career Pathway

7 References

What happens following oSES submission?

- Submission as part of the Development Consent Order (DCO)
- Hearings during DCO examination
- Feedback from stakeholders
- Ongoing dialogue for developing SES through the development stage of the project up until financial investment decision (FID)

RWE

MACQUARIE

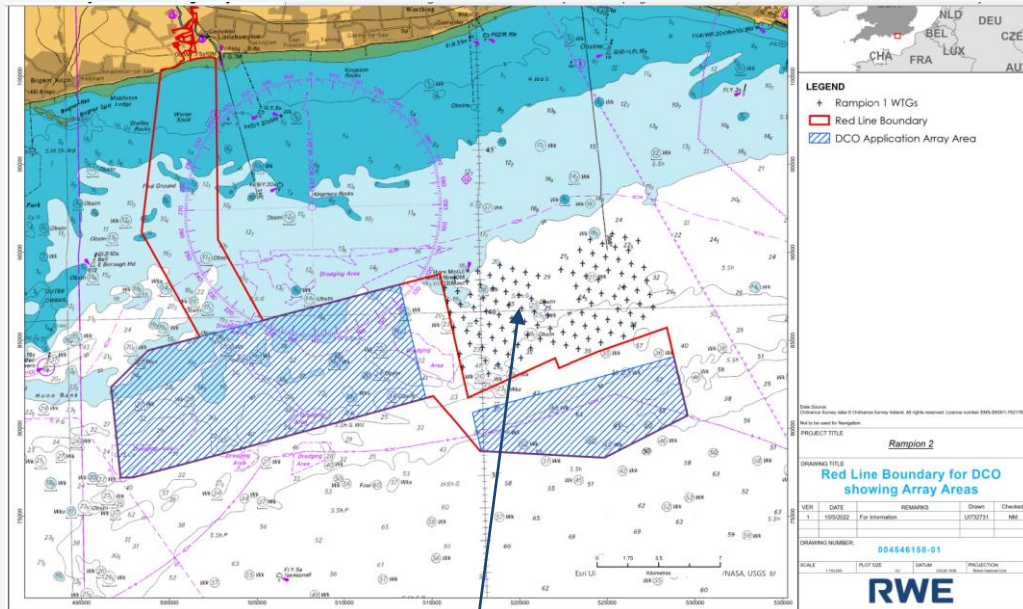
ENBRIDGE

Rampion 2
WIND FARM

Rampion 2 offshore wind farm project:

Our approach to Skills and
Employment

Project overview



Original rampion project

- Up to 90 turbines with a max tip height of 325m
- Project to the west and south of the original Rampion project

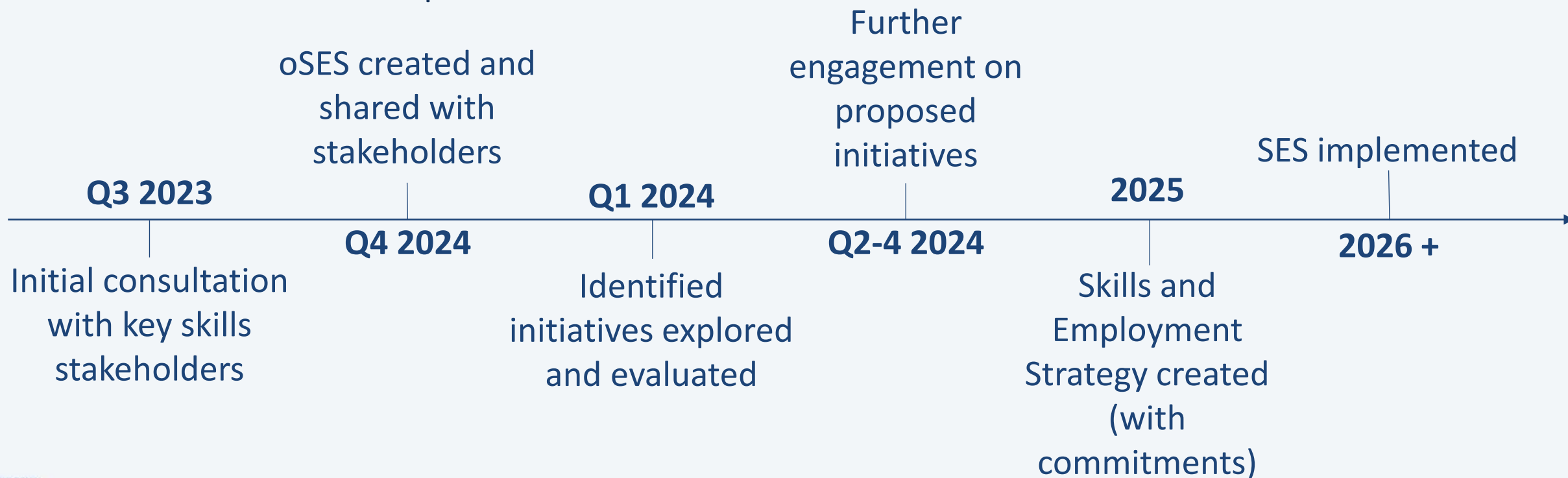


- Landfall into Climping beach, underground cable until connecting into Bolney substation
- Following DCO award, the project plans to start construction in early 2027 to be operational by 2030.

OSSES development

Our approach for this region

The project is currently engaging with key skills stakeholders to develop commitments to include in the Skills and Employment Strategy (SES) following submission of the oSES in July 2023. See an indicative timeline of the process below:



Stakeholders Interviewed

No.	Industry/sector	Organisation
1	Council (Host Authority)	West Sussex County Council
2	Council	East Sussex County Council
3	Council	Brighton & Hove City Council
4	Council partnership	Adur & Worthing Councils
5	Chamber of commerce	Sussex Chamber of Commerce
6	Education provider	STEM Learning UK
7	Military support organisation	Career Transition Partnership
8	Operational Offshore Wind Farm	Rampion 1
9	UK Government	Department of Work & Pensions
10	Council	Arun District council
11	Council	Horsham district council
12	Education provider	Chichester College Group
13	Education provider	Institute of Technology Sussex
14	Education provider	East Sussex college

Types of issues raised

Priority populations:

- Young people
- Care leavers
- SEND students
- Veterans
- Refugees
- Unemployed
- Those aged 50+

Priority issues:

- Shortage of tutors
- Areas with high levels of deprivation
- Transition to Net Zero
- High numbers of SMEs and upskilling SME workforce
- Overcoming transport related barriers

Examples of best practise and local initiatives

Local skills
improvement
plans

Open doors
programme

TeenTech
Sussex

Carbon
literacy
project

Careers hubs

Support into
work
programme

Teacher
encounters

Examples of possible solutions

Developing
leadership
skills

Raising
aspirations
programme

Academy
programme

Military
transition
programme

Pre -
apprenticeship
application
webinar

Educating the
educators

Skills
bootcamps

STEM
ambassadors



What can you do to help us?

- Identify key players/stakeholders for us to engage with
- Facilitate introductions to other NSIPs with overlapping interests
- Collaboration (willingness to collaborate/work with us/share best practise), please feel free to do so after this presentation
- Feedback on this presentation, what was missed? What was valuable to you and your organisation?

Reach out to either:

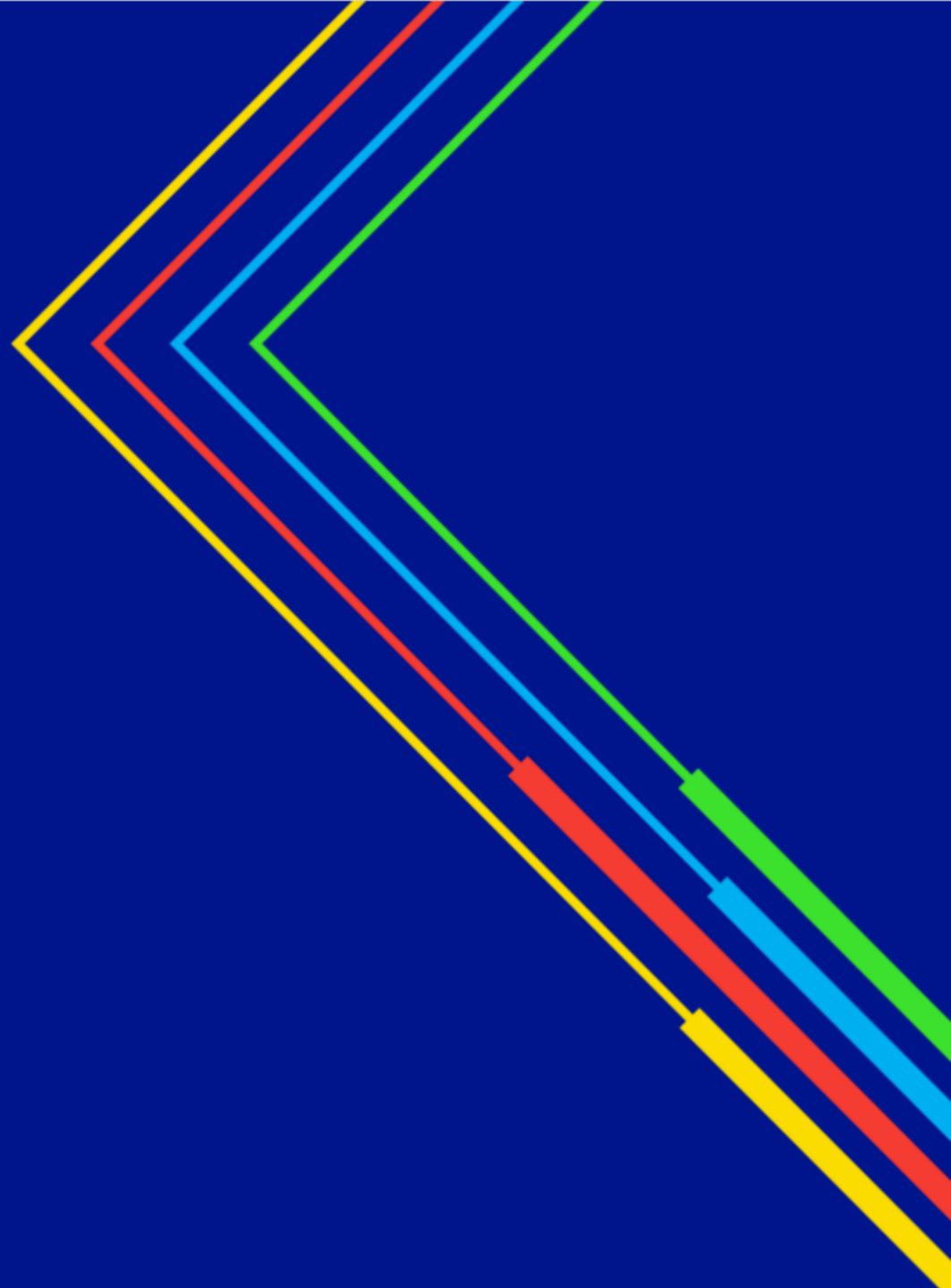
Celia.Anderson@rwe.com or Hannah.Woodgate@rwe.com

NSIP Centre of Excellence

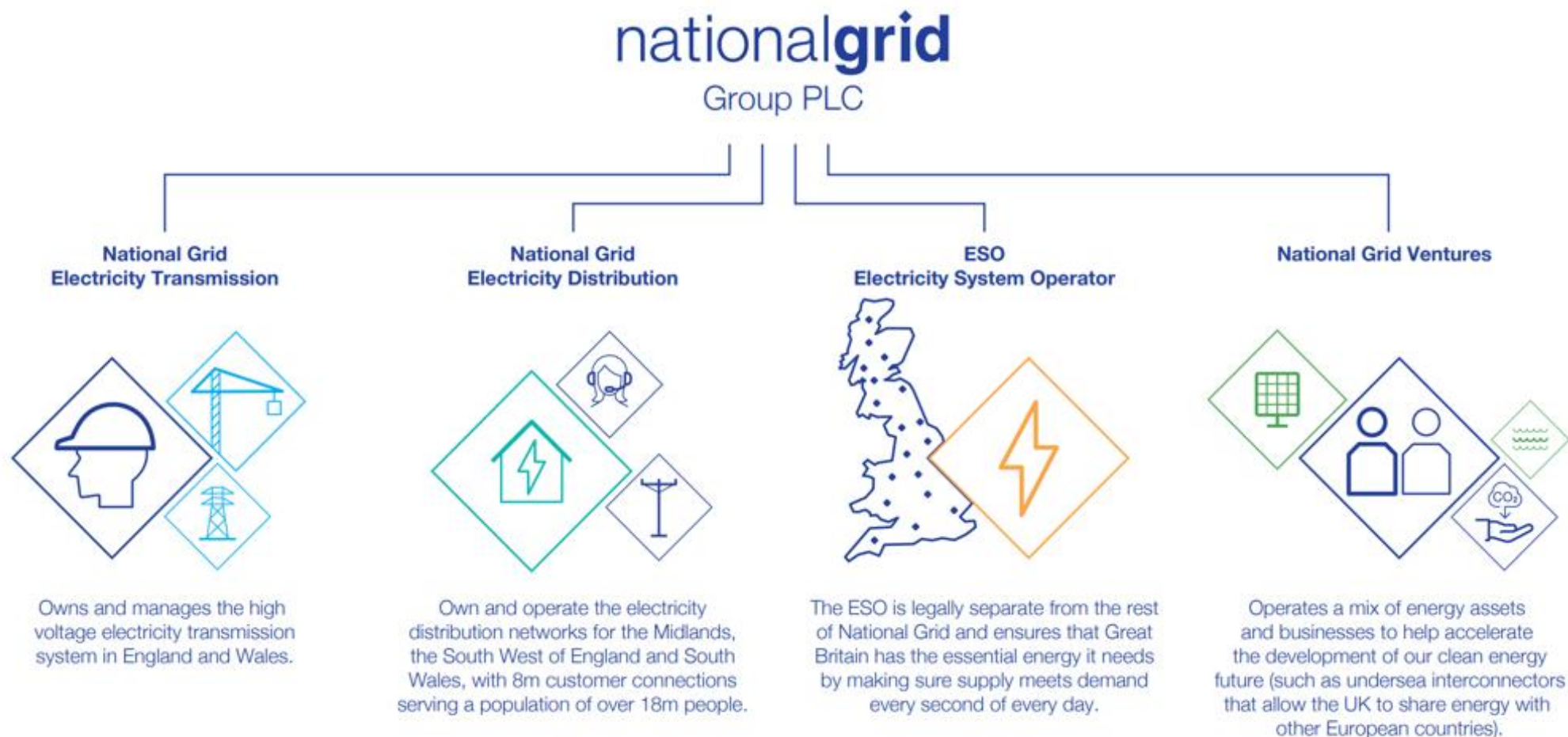
**National Grid Electricity
Transmission:**

Developing skills through The Great
Grid Upgrade

national**grid**



Introduction to National Grid Electricity Transmission



The Great Grid Upgrade

The Great Grid Upgrade is the largest overhaul of the electricity grid in generations. Our infrastructure projects across England and Wales are helping to connect more renewable energy to homes and businesses.

The Great Grid Upgrade will play a big part in **the UK government's plan to boost homegrown power**. It will help the UK switch to clean energy and make sure our electricity network is fit for the future; carrying more clean, secure energy from where it's generated to where it's needed.

There are **17 network reinforcements** identified as 'essential' and which need to be accelerated to meet 2030 targets. These include upgrading existing infrastructure and developing new.

More clean energy for all

The Great Grid Upgrade will enable the electricity grid to carry more clean energy to communities in every part of England and Wales, helping us all reach net zero faster.

Energy security

The Great Grid Upgrade will connect clean energy that's produced right here in the UK, increasing the self-sufficiency of our energy supplies.

A grid that's fit for the future

As we continue to reduce our reliance on fossil fuels and increase clean energy generation, we'll be using more electricity than ever. That means we'll need a grid that's able to carry all this extra electricity to wherever we might need it.

Investment close to home

As well as helping to reach net zero, the UK government suggests that investment in onshore network infrastructure could support up to 130,000 jobs and contribute an estimated £4-11bn of GVA (gross value added) to Great Britain's economy in 2050.*



The energy industry and future workforce needs

Our research estimates that the UK energy industry will need to recruit **400,000 jobs by 2050**, of which **260,000 will be new roles** and **140,000 will replace those who have left the workforce**.

There are several factors contributing to this challenge:

- **Different capabilities** will be needed in the future, compared to those today
- Large proportion of the **workforce is expected to retire** by 2030
- **Competition for talent** with other industries
- Narrow pipeline of young people pursuing STEM qualifications

The scale and pace of the energy transition required **collaboration** to ensure we **develop the skills** that are needed for the **future energy workforce**.

We are committed to supporting skills development in the communities where we operate

We run a number of programmes to deliver this:

Accelerate social mobility in the communities we serve

Grid for Good is building a diverse talent pipeline from under-served groups; delivering employability focused skills to **45,000 people by 2030.**

Engage directly in our communities through volunteering

Target for **500,000 employee volunteering hours** by 2030.



Accelerating social mobility

Through our Grid for Good programme, we work with schools, colleges and community groups to expose them to opportunities in our organisation

for engage
ages 3-15

inspiring young minds, supporting STEM and sustainability for teachers, parents, guardians



for access
ages 16-25

introduction to the energy industry; tailored skills curriculum and coaching through applications process for apprenticeships and supported internships



for excel
ages 18-22

undergraduate programme for high performing candidates from low/zero income backgrounds



for accelerate
ages 25+

providing practical routes back to work for role-ready individuals from challenging situations



Taking an evidence-based approach to evolve our programmes

Why?

The **scale and geography** of our projects (and overlap with other NSIPs) creates a significant opportunity to develop initiatives that are:

- **Effective at a labour market scale** across projects
- Promote **value for money** and **demonstrate efficiency**
- Are **supportive of changing landscape** (e.g. LEPs, funding, wider quantitative skills planning)

How?

- **Based on the realistic scale of opportunity** – Jobs, skillsets, contract tenure, supply chain element etc in the context of regional economic headlines for the projects
- Led by **detailed socio-economic profiles and stakeholder insights**
- **Complementary** and **collaborative** – cognisant of local/regional objectives, pre-existing policy, strategy and initiatives
 - Where can Grid's existing programmes be tailored to local / regional priorities, and where are new initiatives required
- **Targeted** to spatial and policy areas / initiatives where we can make a real difference
 - Focused at labour markets, not projects – to fit in with regional skills co-ordination and long-term transferability

- Brings together local authority officers to share information, experience and practical support
- Provides a direct link for national government and local authorities
- Produces resources and materials to help spread best practice

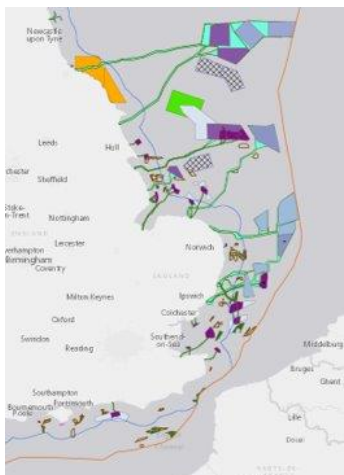
To join contact

garreth.bruff@local.gov.uk

sarah.lewis2@local.gov.uk

“PAS exists to support local planning authorities in providing effective and efficient planning services and to support the implementation of changes in the planning system”

www.local.gov.uk/pas



NSIP Centre of Excellence – Coming up

NSIP Centre of Excellence Conference

The Apex, Bury St Edmunds

Wednesday May 8th 2024

Free event but limited availability

To book go to: -

<https://www.eelga.gov.uk/events/nsip-centre-of-excellence-conference/>