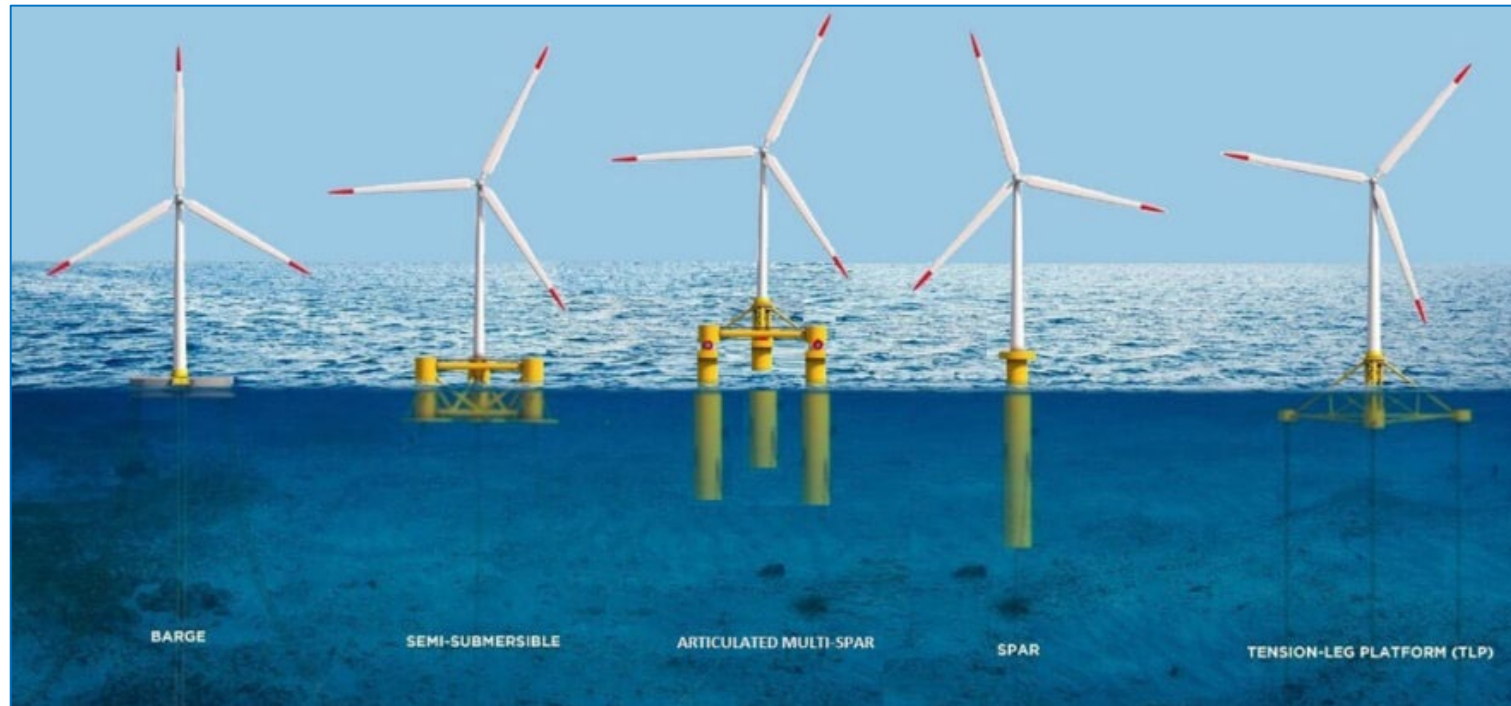


# CELTIC SEA FLOW REGIONAL STRATEGY



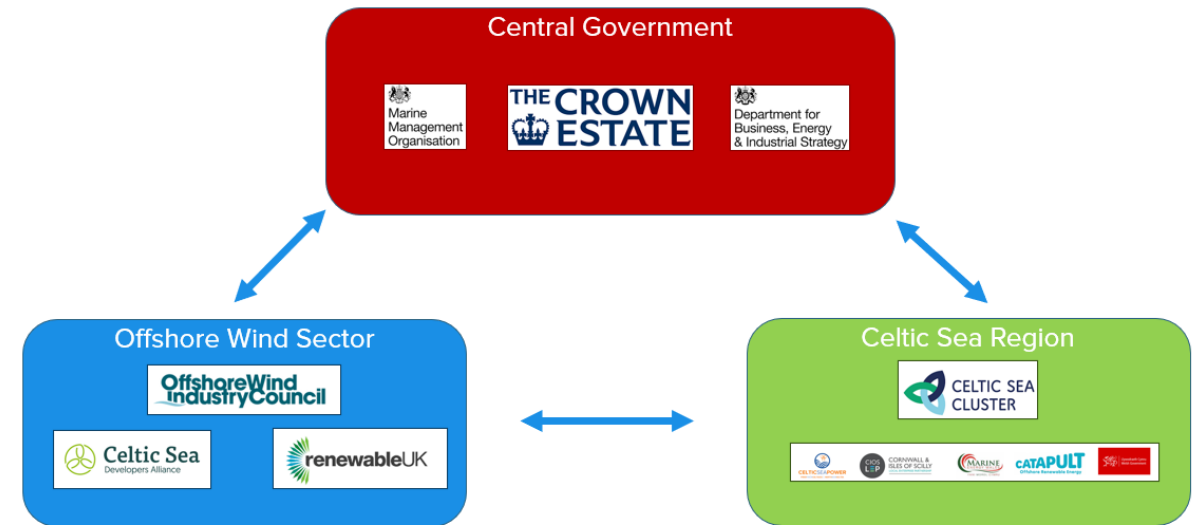
# Structure

1. Introduction
2. Celtic Sea Context
3. Celtic Sea FLOW Strategy
4. Celtic Sea Projects
5. Conclusion

# The Cluster

## CELTIC SEA CLUSTER

- **Partners** – we represent key regional leaders:
  - **Founding partners** – Celtic Sea Power, Cornwall & Isles of Scilly Local Enterprise Partnership, Marine Energy Wales, Offshore Renewable Energy Catapult, Welsh Government.
  - **Future Partners** – South Wales & Great South West.
- **Mission** - our mission is to make **establish the Celtic Sea as a FLOW world-leader and maximise regional benefits**:
  - **Represent Region** – trilateral relationship – central government, project developers, region.
  - **Regional Benefits** – maximise economic development, GVA and job creation opportunities.
  - **Guide Industrialisation** – guide the development of the Celtic Sea FLOW ecosystem.



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# The Context

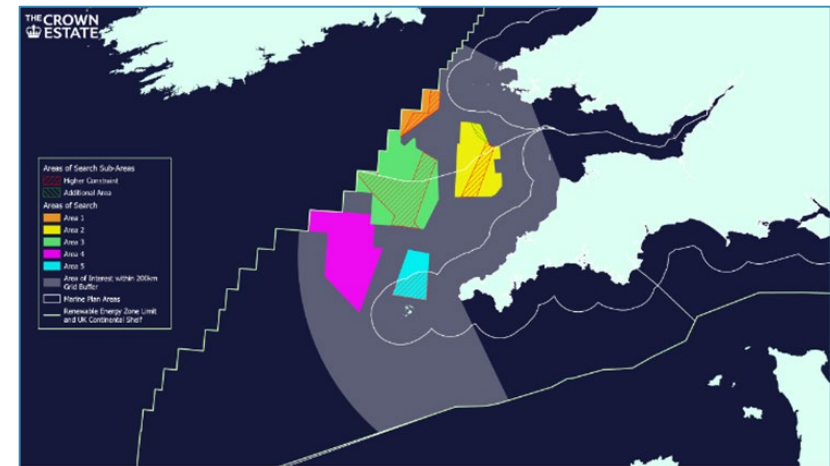
## 1. Regional FLOW Campaign Phases:

- Phase 1 – Policy Engagement – 2018-19
- Phase 2 – Market Creation – 2019-22
  - CFD AR4 – Hexicon-Twinhub
  - TCE – Areas of Search
- Phase 3 – T&D + Long Lead Items – 2021-26
- Phase 4 – Industrialisation – 2024-30



## 2. Phase 3 – Test & Demonstration:

- British Energy Security Strategy – 5.0GW FLOW by 2030
- The Crown Estate – 4.0GW by 2035; 20.0GW by 2045.
- Offshore Wind Sector Deal:
  - 60.0% British work content;
  - 5 x increase in British offshore wind exports.



***“Market Creation Phase complete – Test & Demonstration Phase underway”***

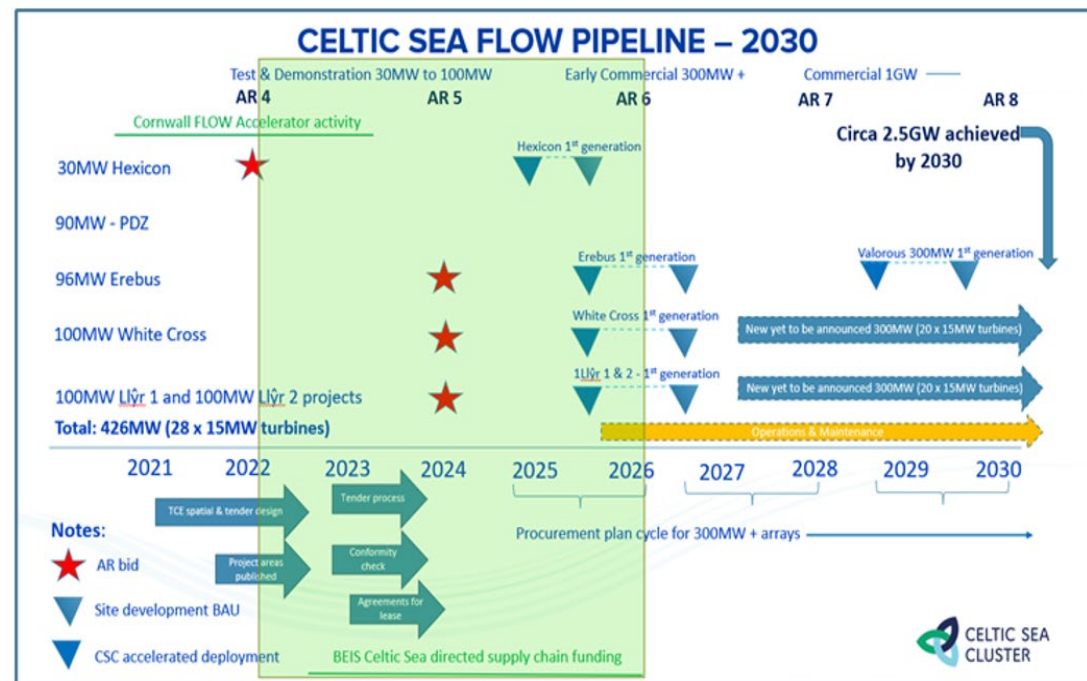
# The Context

## 1. Phase 3 – Test & Demo + Long-Lead – 2021-26:

- T&D Projects – deliver with existing infrastructure.
- Long-Lead Items – develop critical long-lead FLOW Ecosystem components.

## 2. Phase 4 – Industrialisation – Long-Lead Items:

- Ports – e.g. multiport solution essential.
- Grid – e.g. capacity & extend transmission network offshore.
- Local Capability – e.g. support vessels & offshore tools.
- Local Capacity – e.g. EPC business models & SME size.
- Workforce – grow ahead of time to meet FLOW needs.



**“Need to start work now on Celtic Sea FLOW ecosystem’s long-lead items”**

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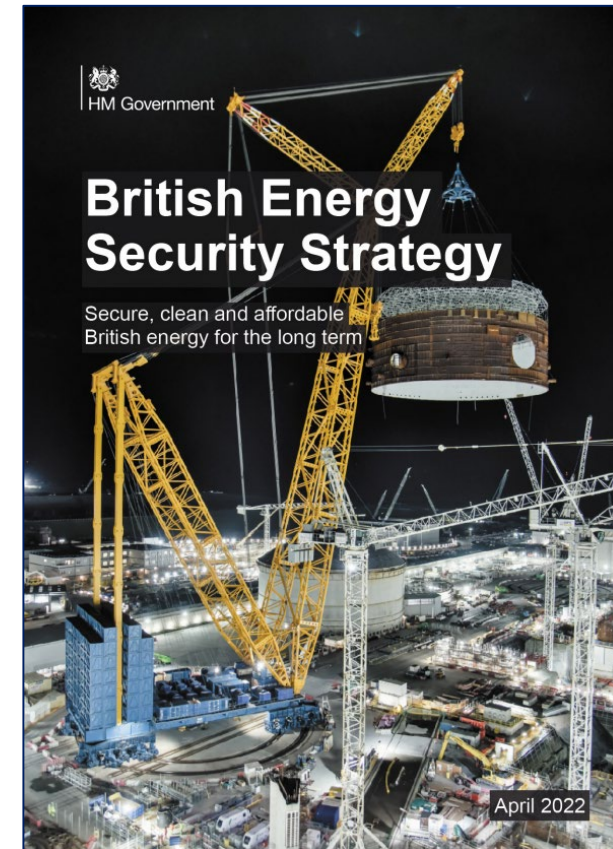
# The Strategy

## What is the purpose of our regional strategy?

**Coalition strategy** to answer and explain the critical question: “How are we going to do this?”

## Effective Strategy answers these questions

1. What is the context?
2. What are the strategic objectives?
3. What are the resources?
4. What are the selected courses of action?
5. What is the cluster spirit?



**‘Our strategy answers the “How are we going to do this?” question.’**



# The Strategy

## Five Strategic Lines of Action

### 1. Lead Region:

- Policy Engagement
- Strategy Execution

### 2. Refine Market:

- Zonal Planning
- Lease & Subsidy Regimes

### 3. Accelerate Industrialisation:

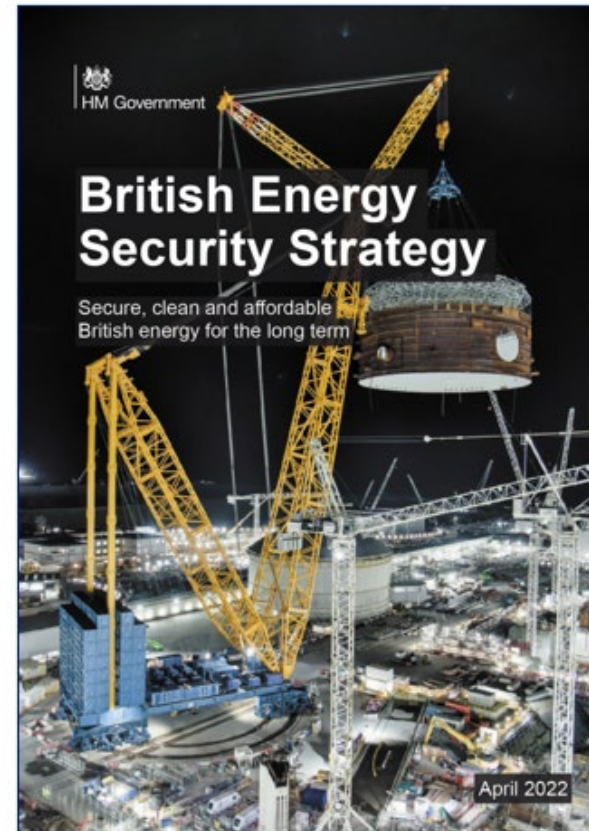
- Regional Ecosystem Modelling
- Regional Infrastructure Guidance

### 4. Develop Cluster:

- Grow Cluster Capability & Capacity
- Maximise Local Content, GVA, Jobs

### 5. Integrate Enterprise Support:

- Grow Workforce
- Align RD&I & Regional Support



***‘Need to start work now on Celtic Sea FLOW ecosystem’s long-lead items.’***

# Line-of-Action 2 – Refine Market

## Refine Market

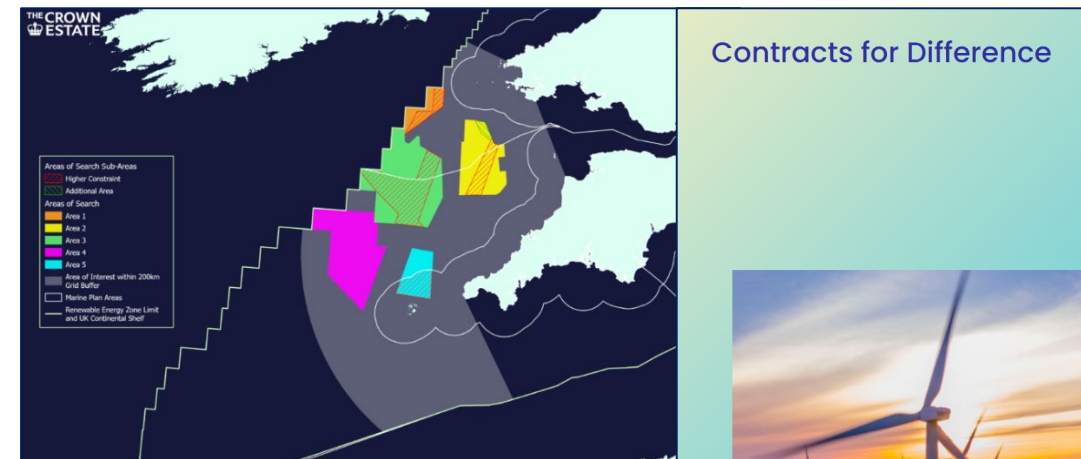
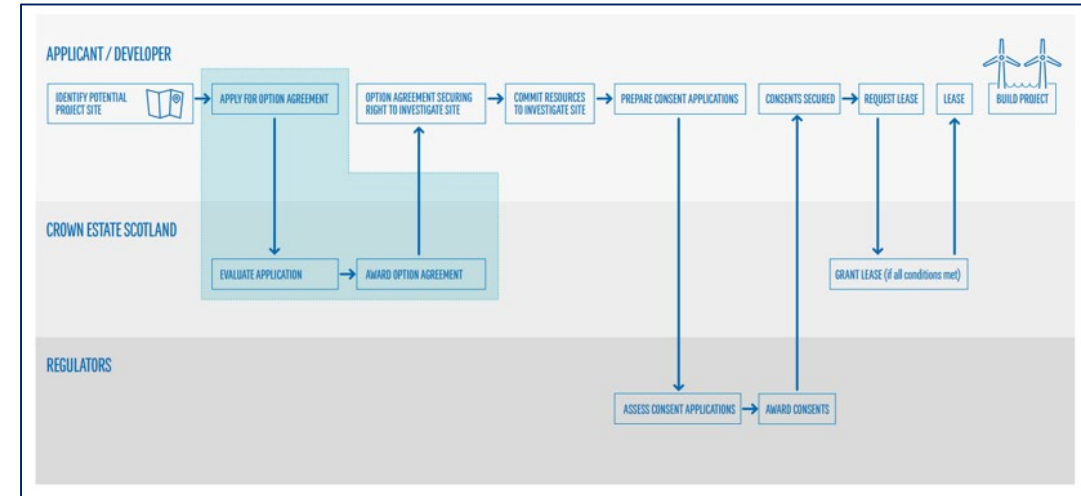
We aspire to halve the current offshore wind development cycle of 8-10 years, through:

a. **Zonal Planning** – a better integrated offshore development process, which achieves a number of interrelated benefits:

- reduce development time;
- reduce project developer risk,
- reduce project cost of capital & LCOE;
- reduce marine cumulative impact..

b. **Lease & Subsidy Regimes** – innovative evolution of the lease and subsidy regimes could be used to:

- front-loaded regional investment.
- increase local content, GVA and job creation.

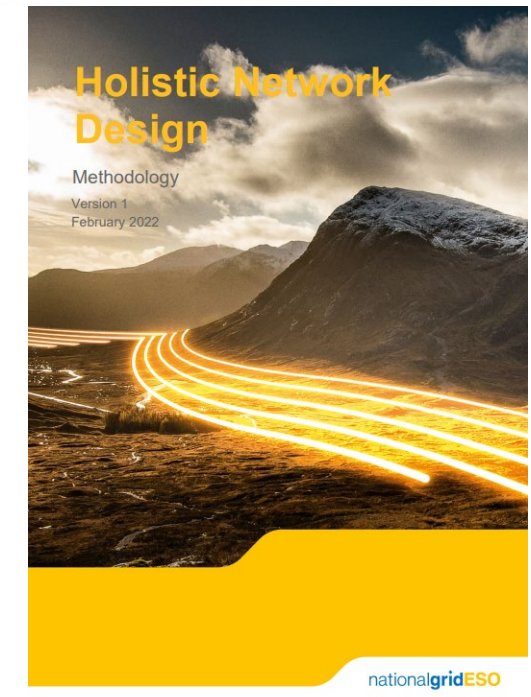
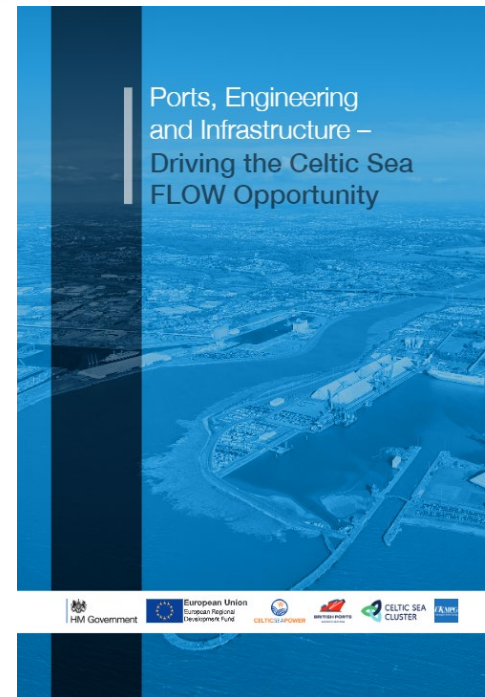
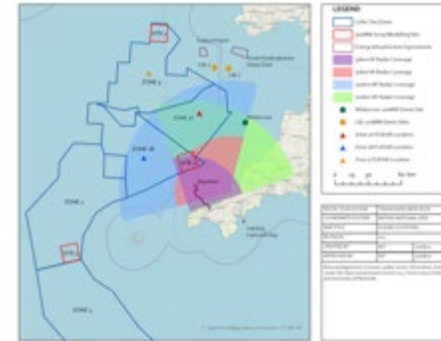


# Line-of-Action 3 – Accelerate Industrialisation

## Accelerate Industrialisation

To maximise regional benefits, guiding the planning and development of regional infrastructure and industry:

- a. Regional Ecosystem Planning – regional ecosystem modelling, especially long-lead items.
- b. Infrastructure Investment – early engagement on ports & grid:
  - Ports – Ports Task & Finish Group:
    - Chair – British Ports Association.
    - Ports Position Paper – recognises there is no single Celtic Sea port solution.
  - Grid – engaging with:
    - Offshore Transmission Network Review
    - Holistic Network design,.





# Line-of-Action 4 – Grow Clusters

## Grow Clusters

To maximise regional benefits, need to help key regional offshore, marine and onshore industries grow or pivot:

- a. **Cluster Capability** – using Cornwall FLOW Simulator, together with Cornwall FLOW Accelerator workshops to provide:
  - Basis of Design – for a systems approach to FLOW project delivery.
  - Industry Guidance – give local industries information on required capabilities.
  - Industry Accreditation – F4OR
- b. **Cluster Capacity** – undertaking detailed regional industry capacity analysis, in particular
  - a. Commercial & Contracting Models
  - b. Novel EPCI models.



# Line-of-Action 5 – Integrate Support

## Integrate Regional Support

Integrate activities of national, regional, research and academic entities supporting the Celtic Sea Cluster:

- a. Grow Workforce – Workforce Task & Finish Group & Future Workforce Model:
  - Demand sub-group – model demand over time.
  - Supply sub-group – HE/FE & other suppliers.
- b. Integrate Regional Support – we will work to integrate key regional FLOW support activities:
  - Applied R&D
  - Business Support.
- c. Secure Inward Investment & Exports – establish region as a FLOW
  - FLOW Inward Investment
  - FLOW Export Hub.



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# The Projects

## Regional FLOW Projects

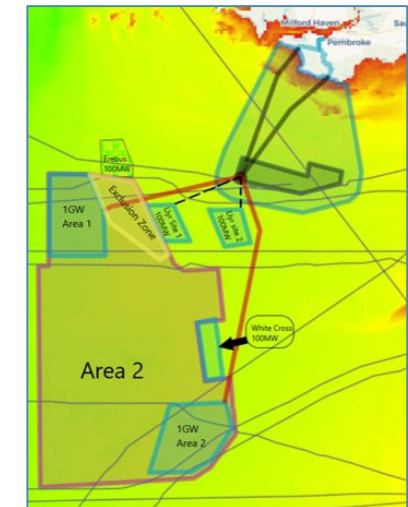
Two large applied R&D FLOW projects, to help guide region development and build industry capability and capacity:

a. Cornwall FLOW Accelerator – £6.0M ERDF project, with 3 principal focuses:

- Zonal Planning – go quicker offshore.
- Cornwall FLOW Simulator – FLOW ecosystem simulation,
- Low Carbon Footprint – minimise hydrocarbon inputs.

b. Pembrokeshire Demonstration Zone – £4.0M ERDF/SBCD project, with 3 principal focuses:

- Offshore Survey – substation site & export cable route.
- Pre-FEED – Multi-connection Offshore Substation.
- Business Model Innovation – regulation & commercial.





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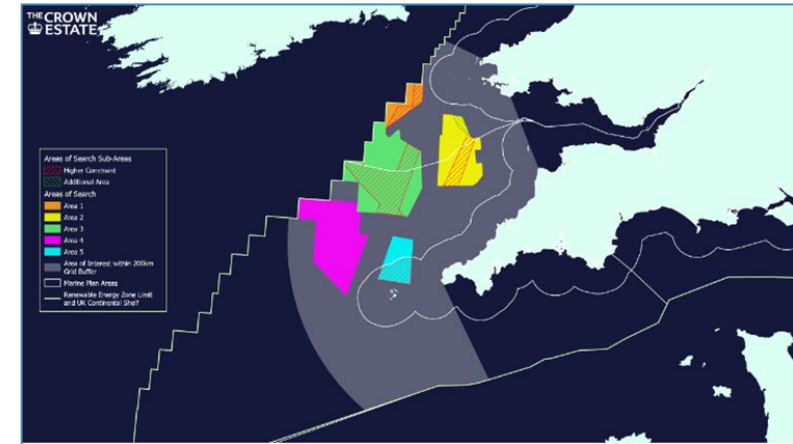
## Spirit

A Celtic Sea Cluster has: track record of policy success; well developed strong relationships with key Celtic Sea FLOW stakeholders.

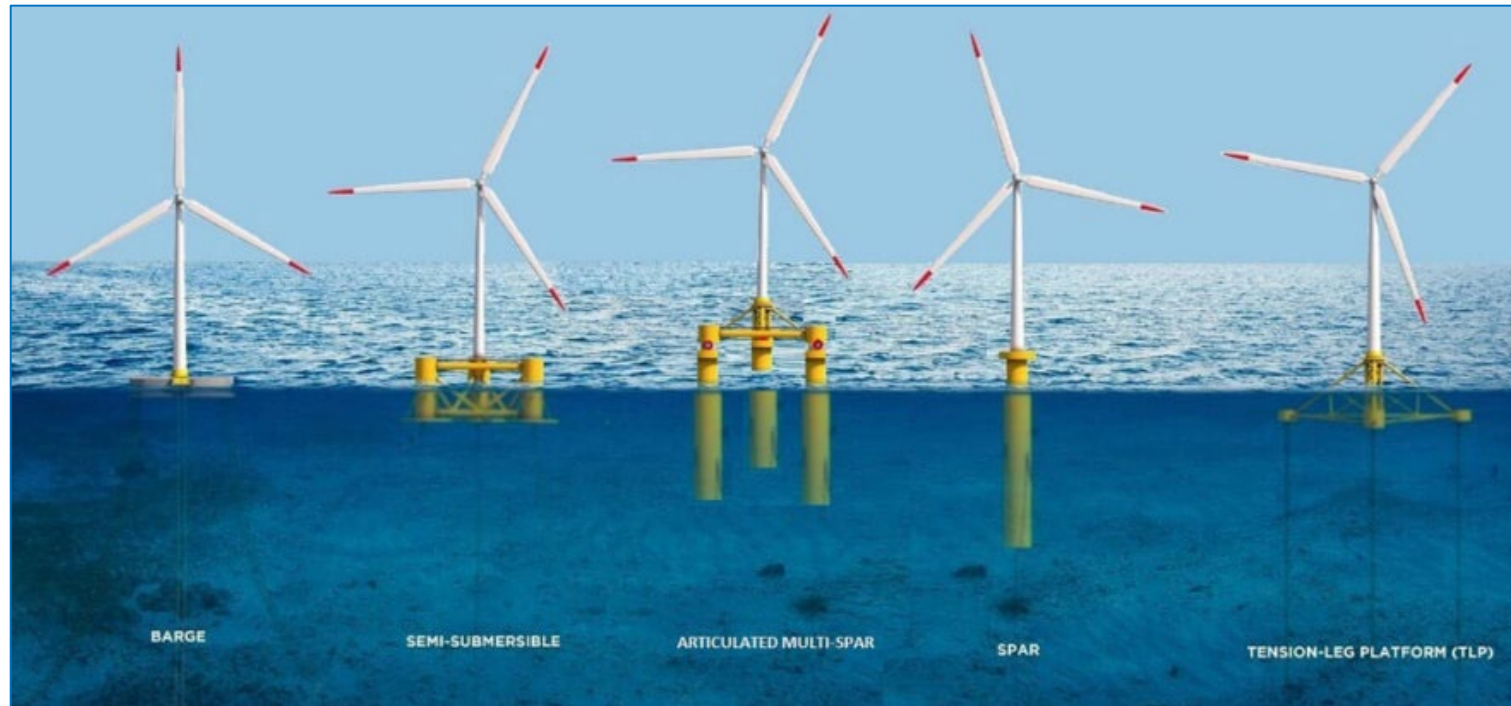
We have a clear well-resourced strategy, together with with excellent industrial potential:

- [Cornwall](#) – well-established offshore renewables cluster.
- [Pembrokeshire](#) – Britain’s leading energy port.
- [South Wales](#) – established South Wales industrial Cluster.
- [Great South West](#) – broader marine-maritime cluster

Ambitious but achievable objectives, plus a passionate and pioneering spirit.



# CELTIC SEA FLOW REGIONAL STRATEGY



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