

Cornwall & Isles of Scilly

the natural place to grow
great business...



Steve Jermy
Non Executive Director
Cornwall and Isles of Scilly LEP



**CORNWALL &
ISLES OF SCILLY**
LOCAL ENTERPRISE PARTNERSHIP

FLOATING OFFSHORE WIND

Briefing Structure

1. Strategic Context:

- HMG Climate Change Emergency
- Offshore Wind Sector Deal
- Energy White Paper

2. Regional Context:

- CC-CIOS LEP Climate Change Emergency
- Zero Carbon Cornwall

3. Seminar Business Planning Focus:

- Governance – RUK FLOW WG – FLOW(GSWW) TF
- Projects – WaveHub, Pembroke, 300MW
- Infra & Supply Chain:
 - GSWW OW Cluster – Celtic FLOW
 - Grid, Ports, Manufacture, Supply Chain
- RD&D – FLOW SIP – Business/UoP
- Skills – OWSD & CIOS LEP
- Investment – CIOS Growth Fund – IUK – ERDF – SIP

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CORNWALL ENERGY CONTEXT



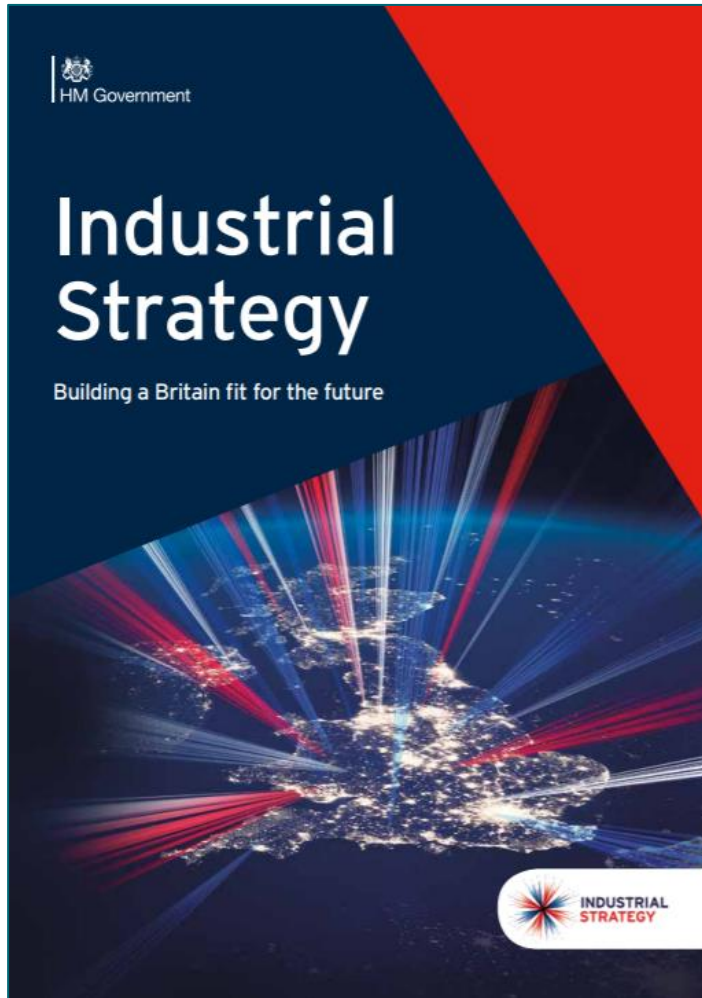
CORNWALL ENERGY CONTEXT

Zero Carbon Cornwall

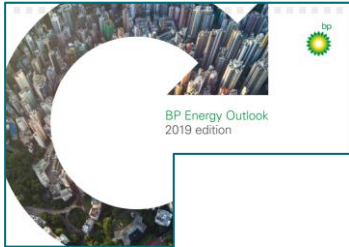
1. Cornwall Council – Climate Change Emergency Declaration:
 - a. Adaptation v “Adapting to ‘baked in’ Climate Change”
 - b. Mitigation v “Preventing Future Climate Change”
2. Cornwall & Isles of Scilly Local Enterprise Partnership (CIOS LEP):
 - a. Local Industrial Strategy
 - b. Climate Emergency
3. Key Cornwall Players:
 - a. Cornwall Leadership Board – Council, LEP, IoS, Local Councils, Local Nature Partnership, NHS, Police
 - b. Zero Carbon Sectors – Agriculture, Construction, Fishing, Marine, Mining,



UK OFFSHORE RENEWABLES



GLOBAL RENEWABLE ENERGY MARKET



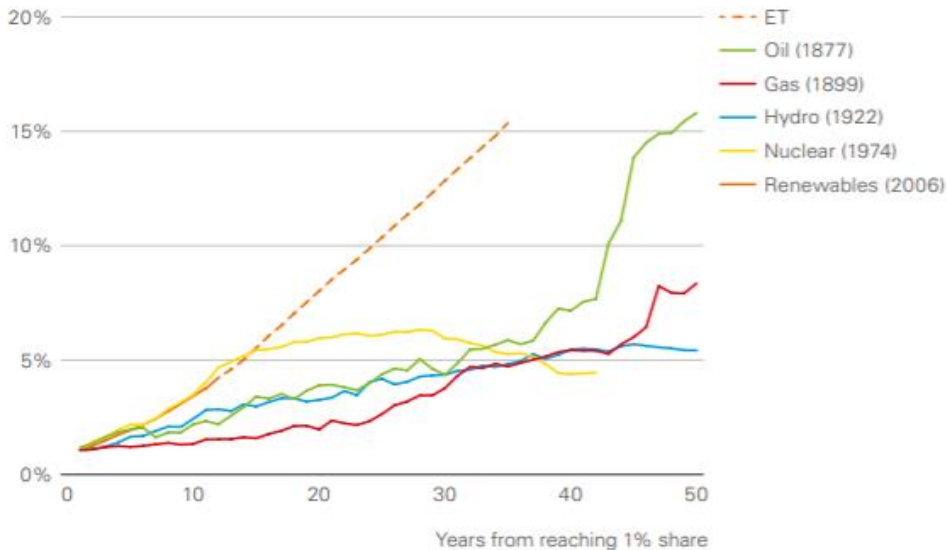
BP Energy Outlook
2019 edition

Fuels – Renewables

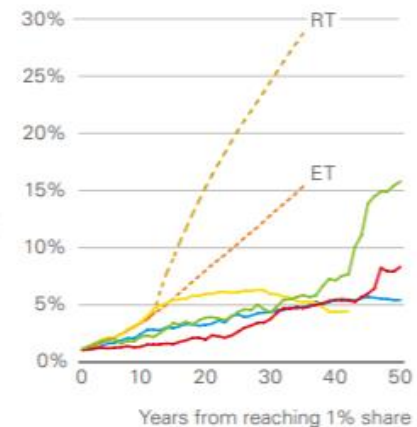
Renewables are set to penetrate the global energy system more quickly than any fuel in history

Speed of penetration of new fuels in global energy system

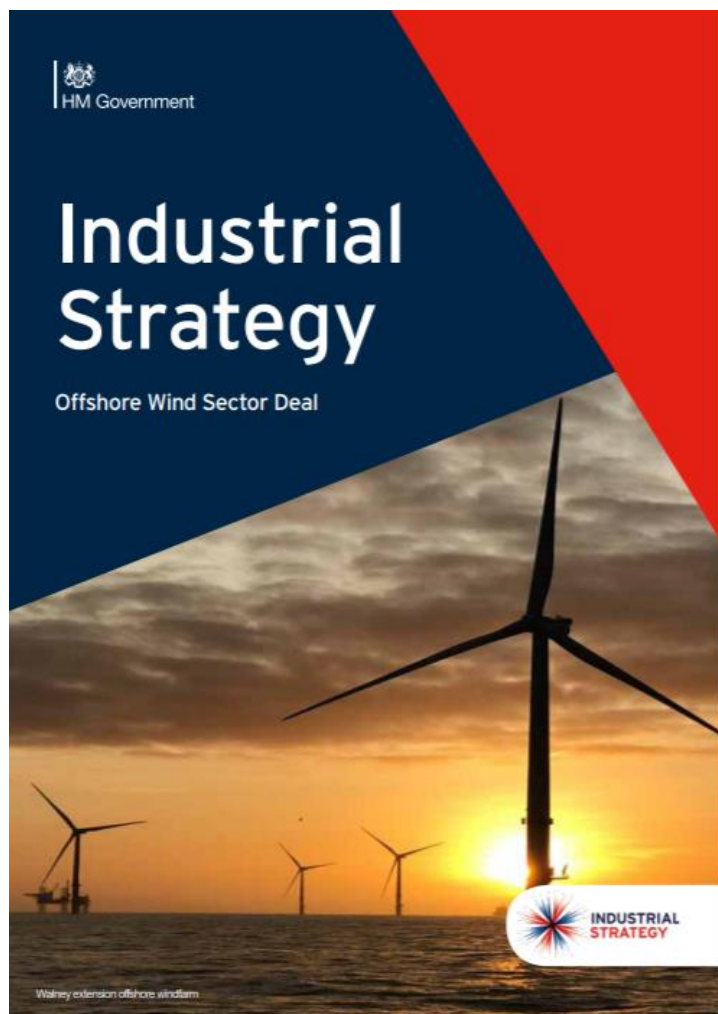
Share of world energy



Share of world energy



OFFSHORE WIND SECTOR DEAL



OWSD

1. CfDs @ up to £557M, May 19 and then 2 year auctions
2. 60% UK content by 2030
3. 1/3rd Female Workforce by 2030
4. Export increase by x 5 to £2.6BN by 2030
5. Sector Investment of £250M, establishing Offshore Wind Growth Partnership
6. Key focus areas:
 - a. Ideas
 - b. People
 - c. Infrastructure
 - d. Business Environment
 - e. Places

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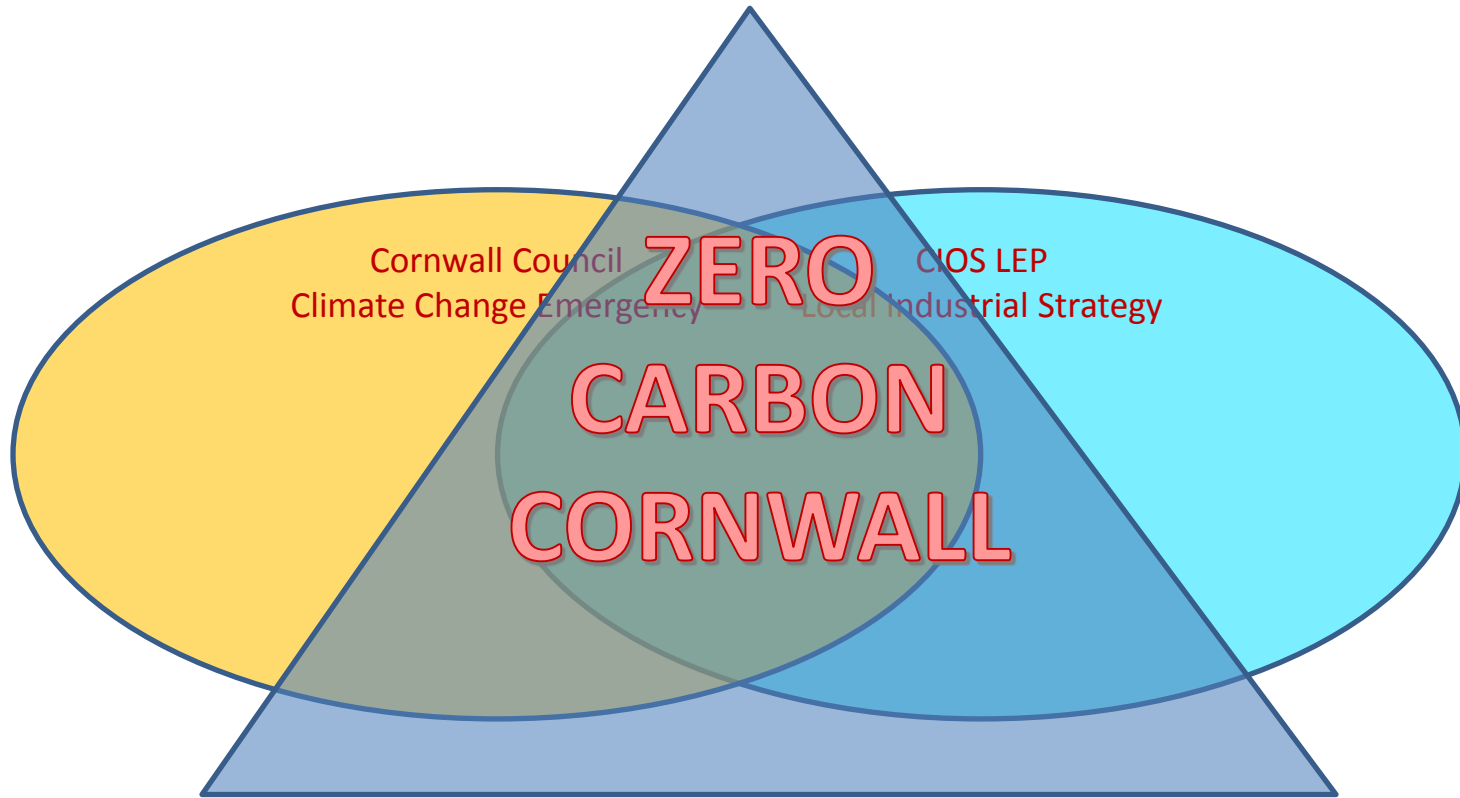
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CORNWALL ENERGY STRATEGY



ZCC
Agriculture

ZCC
Construction

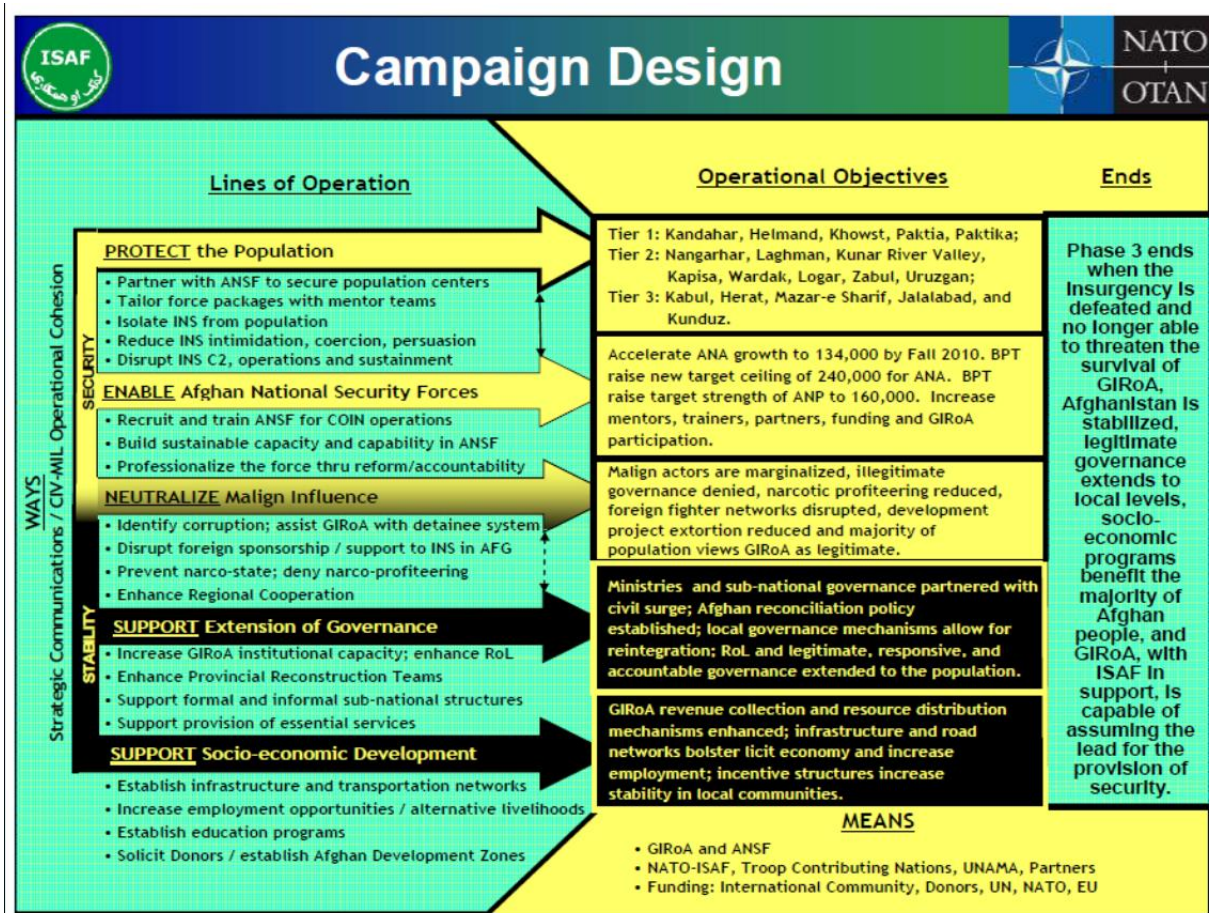
ZCC
Fishing

ZCC
Marine

ZCC
Mining



Work Shop 3 – Strategic Campaign Planning



“Climate Change – Energy Security – Global Recession”



Strategic Work Packages

2020

2025

2030

1. Governance
2. Market, Planning & Projects
3. Applied RD&I & Data
4. Energy System Transition
5. Education & Skills
6. Finance & Investment



Strategic Work Packages

2020

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2. Market, Planning & Projects



3. Applied RD&I & Data



4. Energy System Transition



5. Education & Skills



6. Finance & Investment



£XXXXM

??



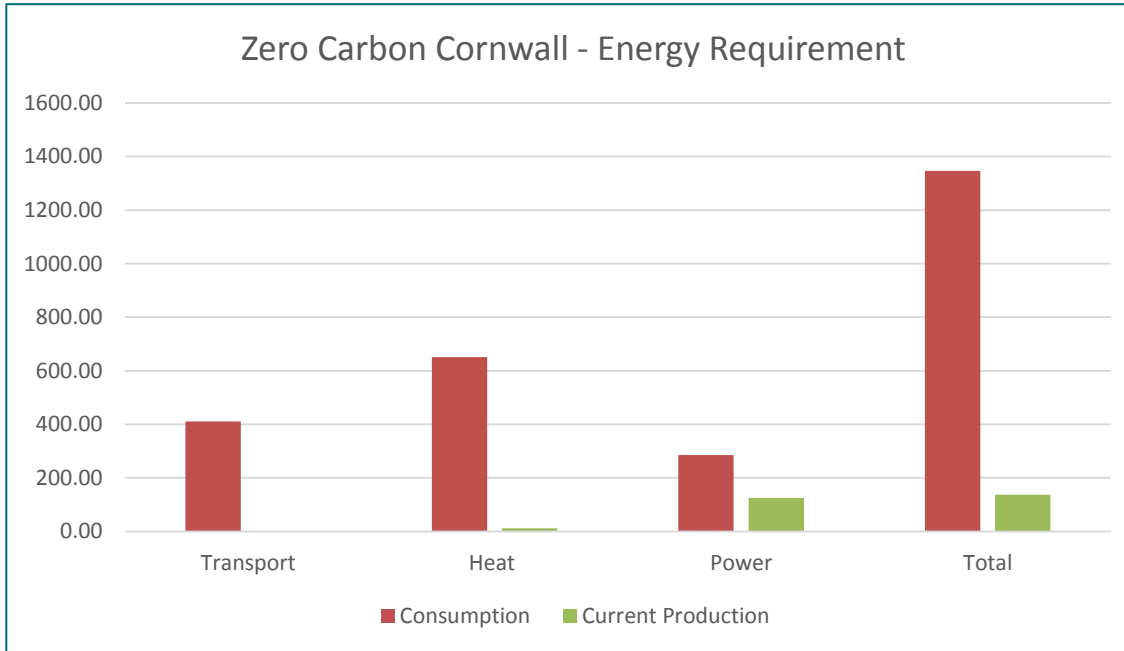
Strategic Resources

1. Local Industrial Strategy – £1-2M
2. Industrial Strategy Challenge Fund
 - Driving the electric revolution – £78M
 - Industrial Decarbonisation – £170M
 - Transforming Foundation Industries - £66M
3. Strength In Places Fund - £10M-£50M
4. ERDF:

ERDF Priority		Euros (€)
PA1	Research and Innovation	91,100,210
PA2	ICT	19,037,608
PA3	SME Competitiveness	172,145,709
PA4	Low Carbon	57,898,855
PA5	Climate change adaptation	11,679,514
PA6	Environment and resource efficiency	12,847,466
PA7	Sustainable transport	57,925,547
PA8	CLLD	14,837,826
PA9	Technical Assistance	No specific C&IoS allocation
TOTAL		437,472,735



Zero Carbon Cornwall - Energy Requirement



	Consumption MWH	Current Production MWH	Shortfall MWH	% of Consumption
Transport	410.96	0.00	410.96	0.00%
Heat	650.68	11.42	639.27	1.75%
Power	285.39	125.57	159.82	44.00%
Total	1347.03	136.99	1210.05	10.17%

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CORNWALL FLOW

- **Deployment Factors:**

- **Offshore Water Depth:**
 - 40-60m minimum
 - 100m-250m optimum
- **Assembly & Port \leq 360Nm**
- **Power & Grid Access**
- **Regional Economic Development**

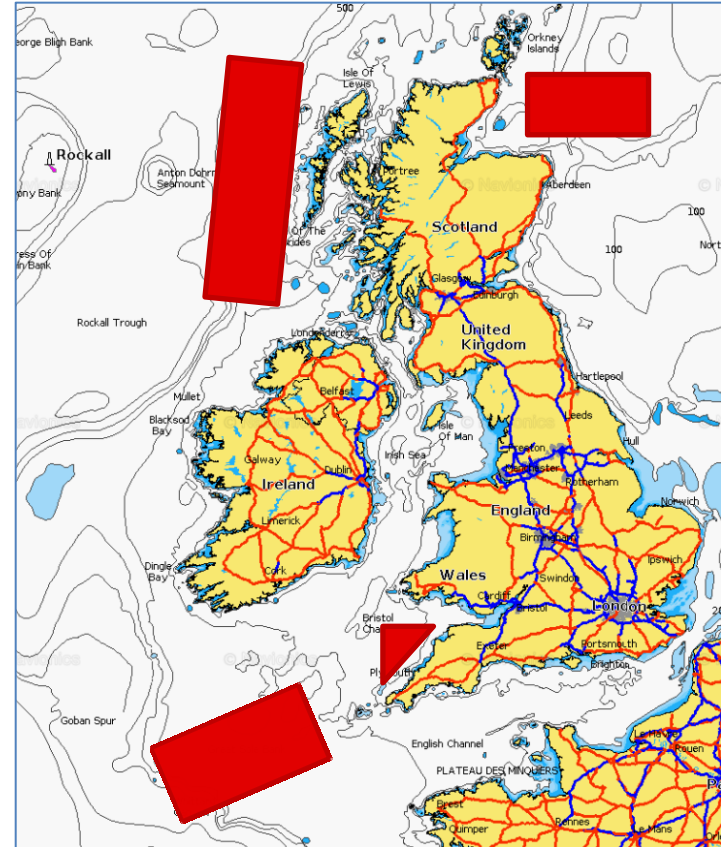
- **Pipeline Design Concept:**

- **GSW & Wales:**

- **WaveHub – 36MW – 2022**
- **PDZ – 90MW – 2024**
- **Celtic Sea-SW Apps – 500MW 2025-27-29**

- **Scotland:**

- **Hywind – 30MW – 2018**
- **Kincardine – 50MW – 2024**
- **Moray Firth-NW Apps – 500MW 2025-27-29**



CORNWALL FLOW

1. Policy Arguments

RECOMMENDATION

2. It is recommended that the Energy Minister:
 - a. note the intention of the Cornwall & Isles of Scilly (CIOS) LEP to develop and lead a *Great South West Floating Offshore Wind Cost Reduction Strategy*, with a target of subsidy-free at 1GW worth of installed capacity;
 - b. note Cornwall Council's intention to secure consent for floating offshore wind at WaveHub, and work with the Council to fund the deployment of FLOW demonstrators or a pilot array at the facility;
 - c. agree Cornwall Council and CIOS LEP's request to work with BEIS officials to develop revenue support models to underpin FLOW installation at WaveHub and in the Great South West;
 - d. agree to provide guidance to The Crown Estate (TCE) to allocate at least 1GW of the forthcoming 6GW new leasing round to establish a floating offshore project pipeline in the South West;

– Cornwall FLOW Seminar – Feb 18

HMG Policy Influence

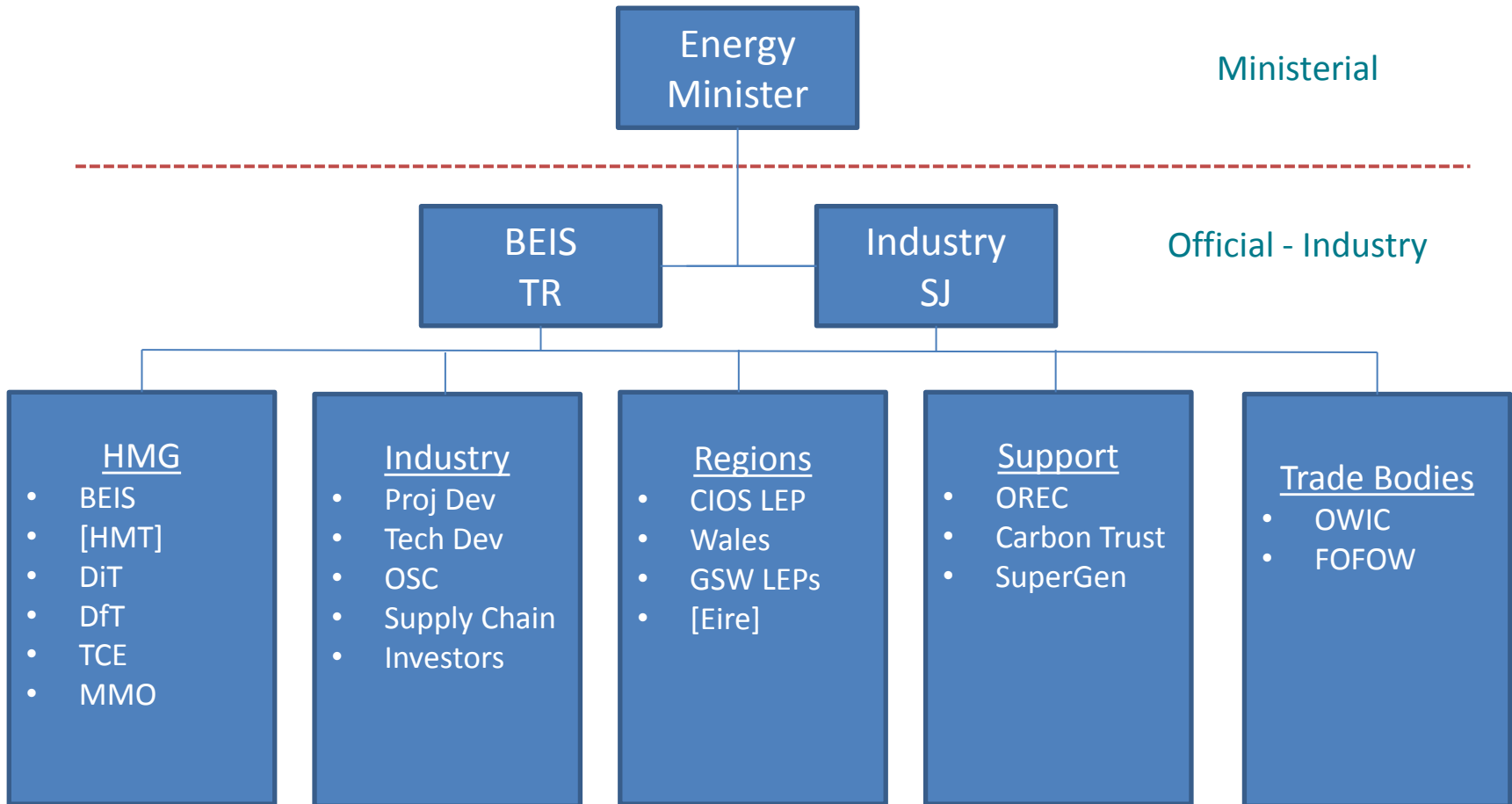
CORNWALL FLOW

1. **1. To unlock FLOW in Britain and help us establish ourselves as a world-leading FLOW exporter, we need:**
2.
 - a governance and leadership framework to provide the strategic direction to public and private sector stakeholders;
3.
 - a clear policy commitment to develop a commercial framework for the large-scale commercial deployment of floating offshore in Britain;
4.
 - a flexible revenue support mechanism to secure commercial investment and provide incentives for rapid cost-reduction;
5.
 - a pipeline of offshore projects of sufficient scale to provide the opportunity for rapid cost-reduction and secure our export position;
 - a coherent communications strategy to give confidence to project developers, technology developers, supply chain and investors.

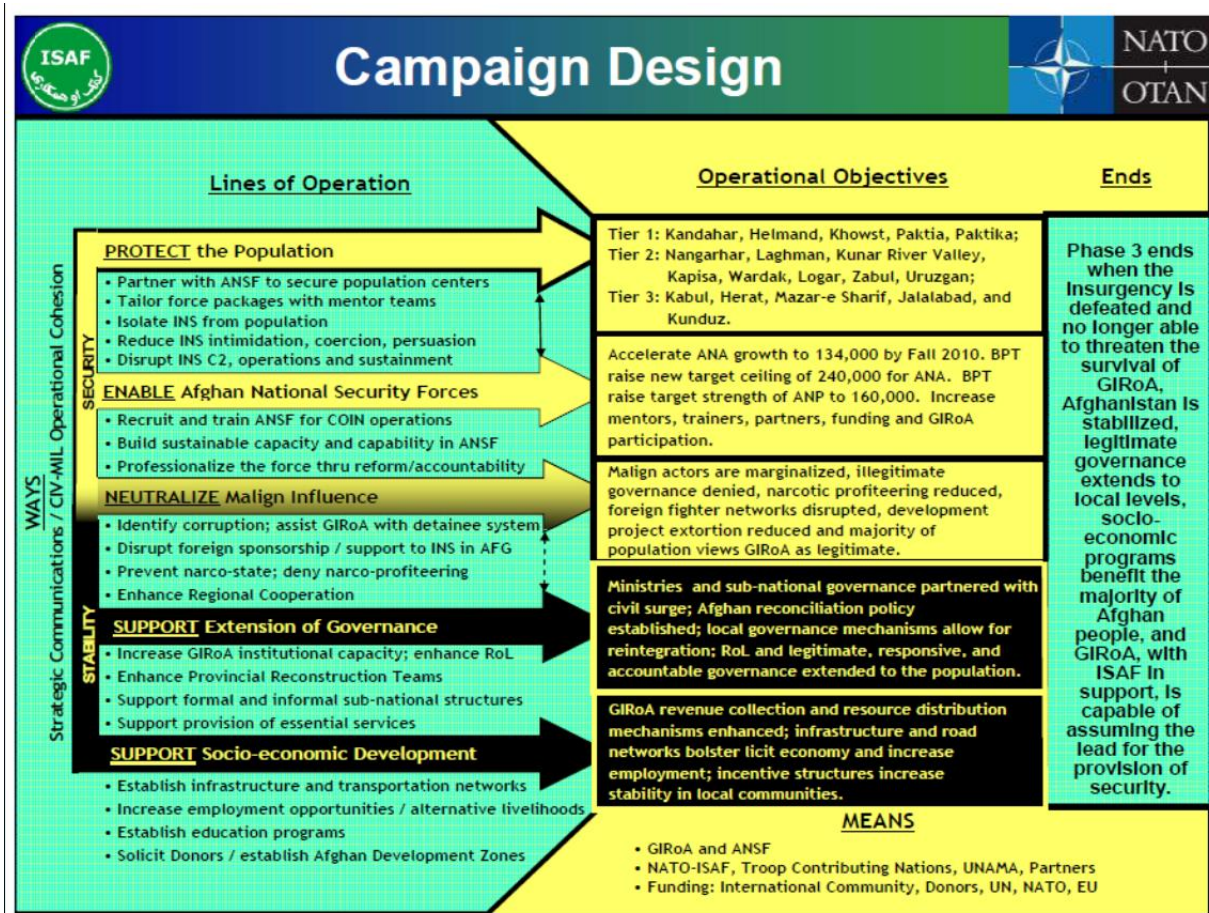
Why British FLOW and what do we need to unlock it?

3. NEXT STEPS

GSW&W FLOW TF Composition



Work Shop 3 – Strategic Campaign Planning



“Climate Change – Energy Security – Global Recession”



FLOW CORNWALL



Cornwall FLOW

Business Planning

1. Policy Context & Revenue Support
2. Project Pipelines
 - WaveHub, PDZ
 - Celtic Sea 300MW
3. Regional Collaborations
 - FLOW TF
 - FLOW Cluster
4. Infrastructure & Supply Chain
 - Infra – Grid, Ports, Transport
 - Supply Chain & Manufacturing
5. RD&I, Skills & Business Support
6. Investment

3. NEXT STEPS

1. Task Force Framework – CIOS LEP to propose make-up to BEIS after 2nd Cornwall FLOW Seminar.
2. Policy Commitment – BEIS and FLOW Industry to work on FLOW Policy Position paper, drawing on CIOS LEP MinSub.
3. Flexible Revenue Support Mechanism – BEIS, with FLOW Industry and TCE support, to develop a framework for:
 - a. Early Demonstration Projects – e.g. WaveHub – using IPPA?
 - b. Early Commercial Projects – e.g. PDZ, SW Apps 500MW – using iCFD?
4. Pipeline of Offshore Projects – FLOW Sector with TCE/TCE(S), to outline national FLOW projects plan.
5. Infrastructure Commitment – starting with grid, regional ports and shipyards
6. Communications Strategy to – BEIS, [Scots Gov], [Welsh Gov], CIOS LEP, draft and execute a FLOW Communications Strategy.

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Cornwall FLOW Seminar III

- 27 June 2019
- ESAM Centre, St Austell
- matt.Hodson@cornwalldevelopmentcompany.com

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