# Re MeMaRe Conference





### 2024

Restoring Estuarine & Coastal Habitats 10 – 11 July 2024



# ReMeMaRe Conference 2024















































# 2024

Roger Proudfoot Environment Agency





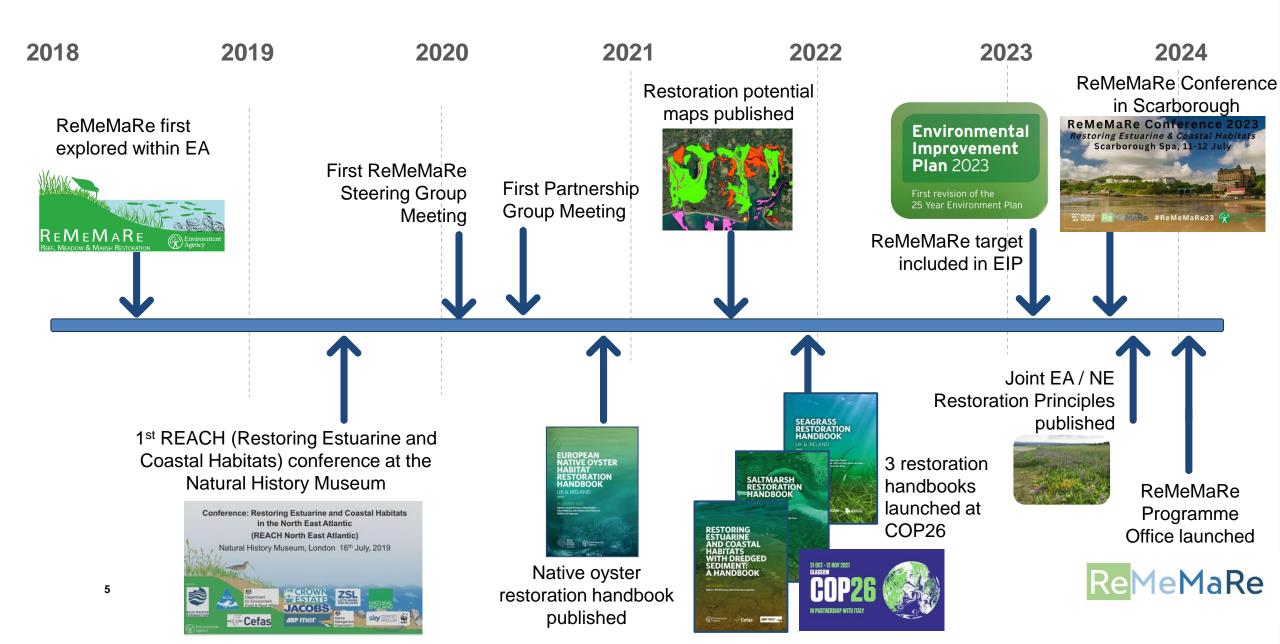


# ReMeMaRe Reflections





#### Timeline





Wildlife and Countryside























**National** 

**NàdarAlba** 

































**UK Centre for** 

**Ecology & Hydrology** 









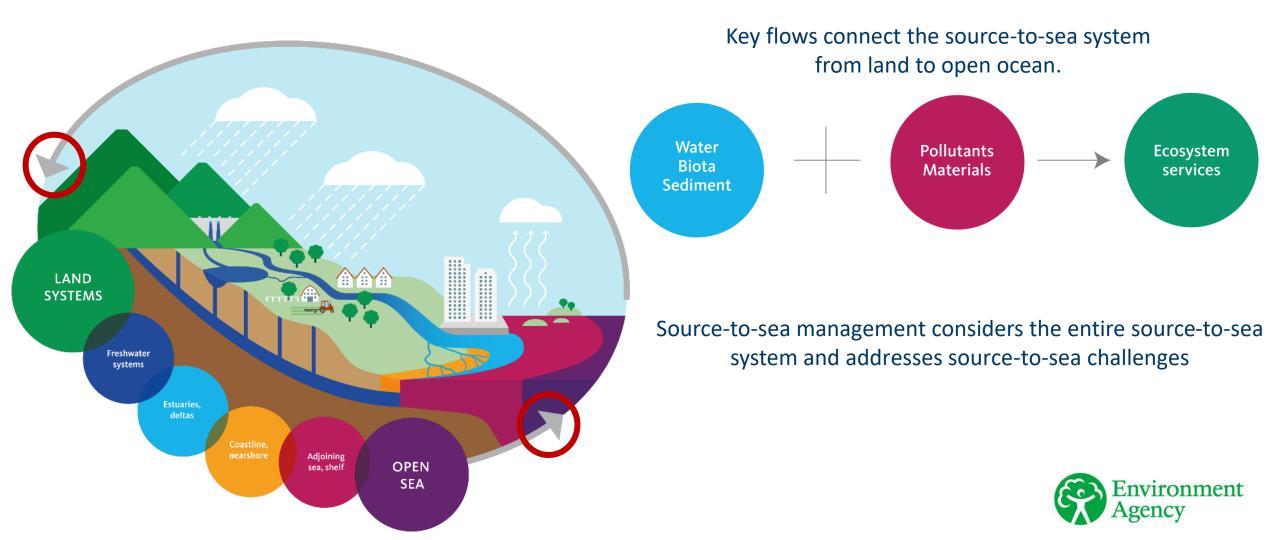








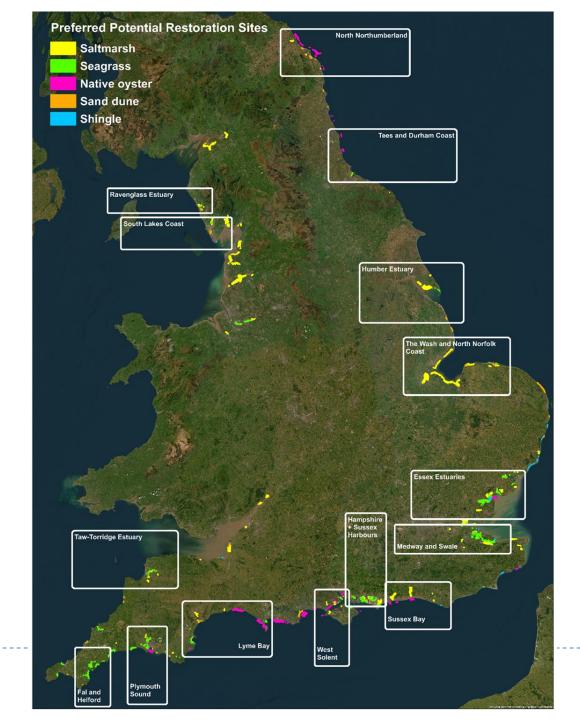
#### Source-to-sea – addressing system linkages



Credit: Stockholm International Water Institute (SIWI)



#### Preferred Seascape Restoration Potential

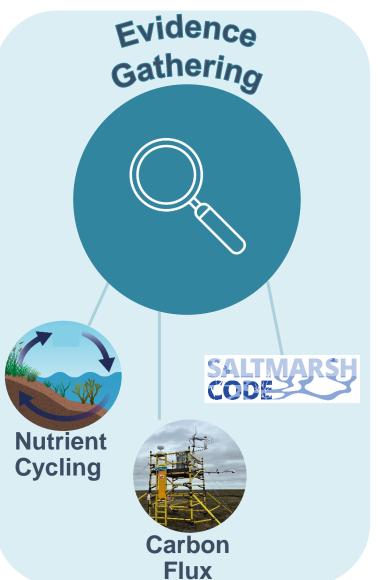


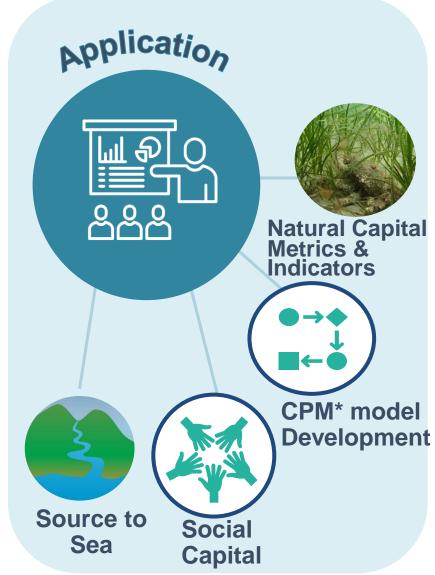
#### Natural Capital Ecosystem Assessment Programme















# ReMeMaRe Conference 2024

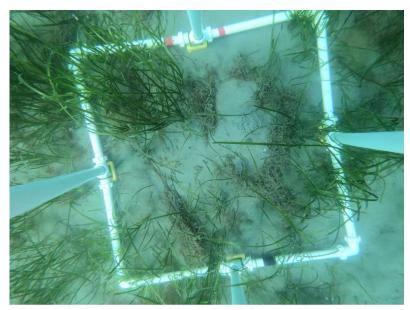




10 - 11 July, Scarborough

ReMeMaRe Programme Talk

Jo Ratcliffe, Environment Agency







CORRECTOR

Jo Ratcliffe – ReMeMaRe Programme Office



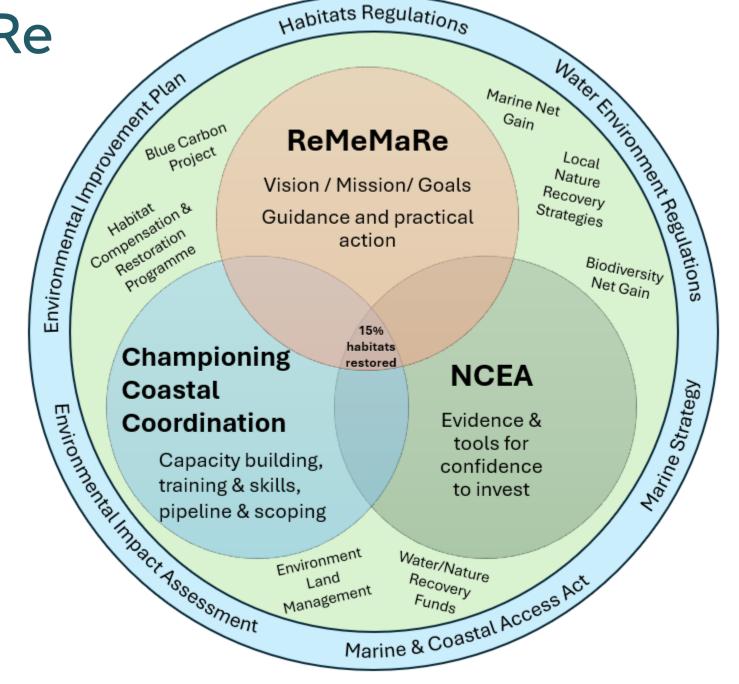
#### **Vision**

# Restored estuarine & coastal habitats that benefit people & nature

#### **Mission**

Restore at least 15% of our priority habitats along the English coast by 2043







#### Environment Agency funded projects 2024/25

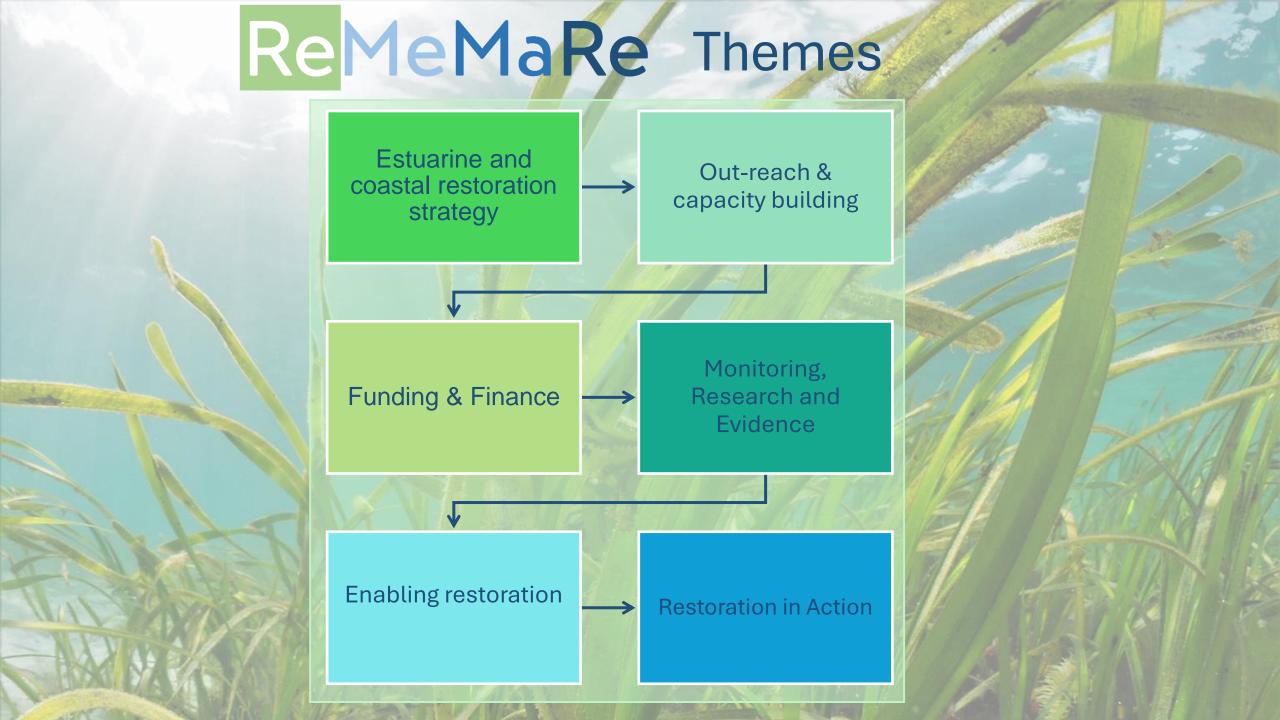




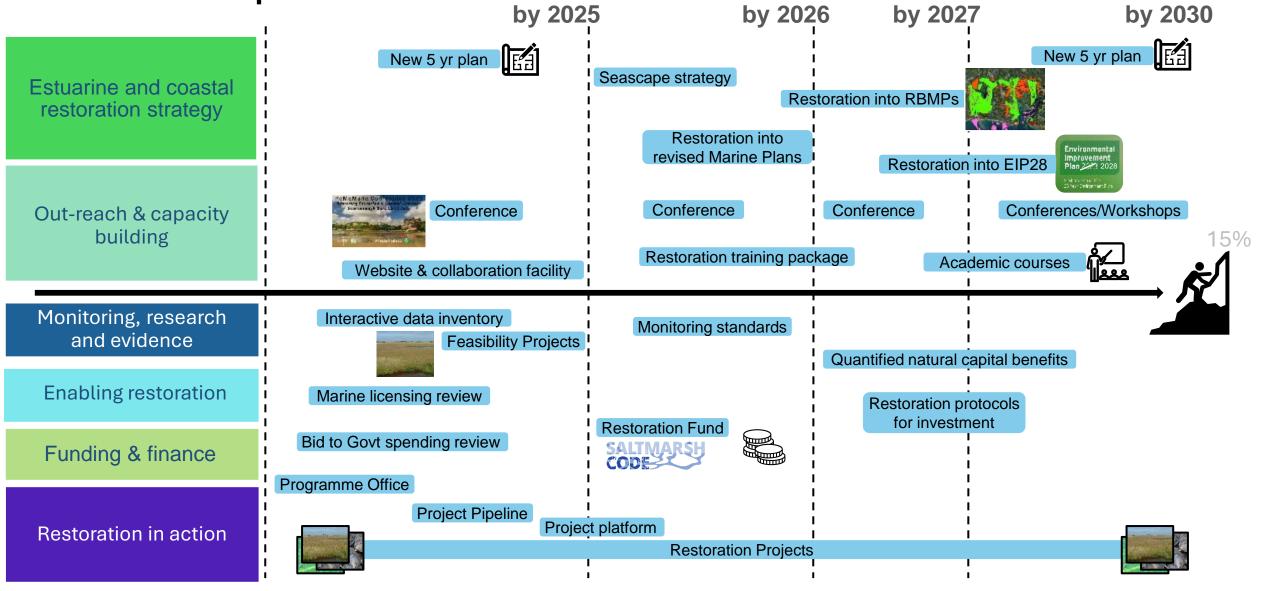
# Re MeMaRe Project Pipeline



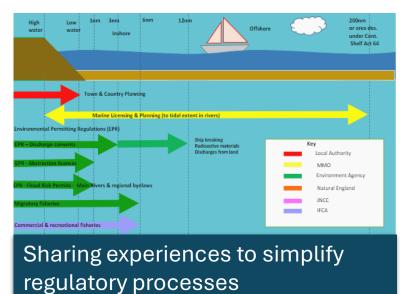




#### Roadmap to 2030





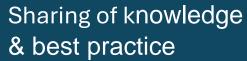






Collaborating to secure longterm funding











https://ecsa.international/rememare/restoring-meadow-marsh-and-reef-rememare

rememare@environment-agency.gov.uk





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10 - 11 July, Scarborough

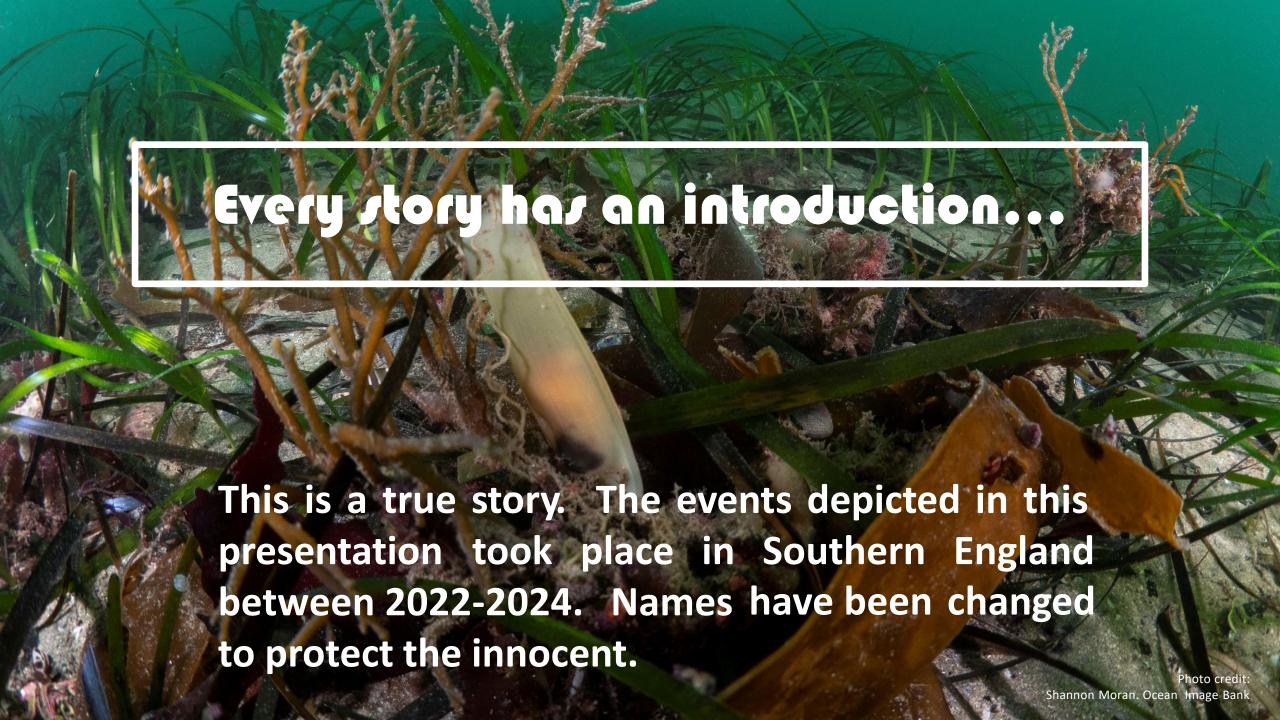
Day One Keynote

Duncan Vaughan, Natural England

# ReMEDIES - a true story



Shannon Moran. Ocean Image Bank



























Working in Partnership with:















# ReMeMaRe Conference 2024



10 - 11 July, Scarborough

Q&A with

### Duncan Vaughan, Natural England

Slido for extra questions
QR code or www.slido.com

Code: 4741966





### Re Me Ma Re Conference 2024

#### **Investing in Restoration Session**

Chair: David Tudor

- Henrietta Stock, Aviva
- Laura Robinson and Wave Crookes,
   Seagrown
- Sarah Brown, Scottish Marine Environmental Enhancement Fund
- Caroline Price, The Crown Estate
- Peter Barham, Strategic Net Gain Task and Finish group and SUDG



# Re MeMaRe Conference 2024

**Investing in Restoration Session** 

# Henrietta Stock, Aviva

Why we have supported marine projects with conservation partners







Supporting marine natural capital projects

Henrietta Stock 10<sup>th</sup> July 2024





To be with you today for

a better tomorrow





### Aviva's net zero 2040 ambition

In March 2021, Aviva set out its ambition to:

• Achieve net zero carbon emissions by 2040 for all of our emissions including from our own operations, our supply chain, our investments and our underwriting activity.

• Achieve a 25% reduction in the carbon intensity of its investments by 2025 and 60% by 2030.

 Reach Net Zero carbon emissions from its own operations and supply chain by 2030.

• To achieve Net Zero, we must offset any residual emissions by removing carbon from the atmosphere.

• That's why, when we announced our net zero commitment, we also announced £100m of funding to support projects in our core markets of UK, Ireland and Canada, which will use nature to remove carbon from the atmosphere.

 These projects aim to support the development of the market for larger scale investment in naturebased carbon sequestration projects.



### What does Aviva look for in a nature project and partner?



Focus on new planting and restoration projects



Demonstrating biodiversity benefits with net gain as a minimum and aligned to Aviva's biodiversity policy



Demonstrating community benefit and access for all



Supporting our customers to become more climate resilient



Robust certification of carbon sequestration



A clear plan for the projects to be self-sustaining in the long term to ensure long term carbon sequestration and biodiversity benefits

# Legacy of our WWT partnership

Creation of 250Ha of new saltmarsh

Protect nature

Combat climate change

Public appreciation of nature

Reverse nature loss

Catalyse investment

Communicate resilience benefits

Inspire others

Community benefit

Research

Open new markets





## Re MeMaRe Conference 2024

**Investing in Restoration Session** 

# Laura Robinson and Wave Crookes, Seagrown

How to drive innovation in marine restorationa perspective from the seaweed aquaculture industry







## **Delivering OCEAN HEALTH**

"...if seaweed was growing over just 9% of the oceans it could remove <u>all</u> of the human-produced carbon in the atmosphere, replace all of our fossil fuels and sustain increased fish production to help feed our growing population..."

De Ramon N'Yeurt et al 2012



### 5 Seas to a successful Ocean Health solution:

- Challenges overcome
- Comprehensive solution
- Capability
- Collaboration
- Cohesive team





### So Many Challenges!

- Licensing
- Finance
- Boats
- People

....growing seaweed...









# It's no secret that seaweed is one of the most exciting nature-based solutions for ocean restoration

### **POTENTIAL**

- Rapid growth & available area
- Huge production potential
- Carbon uptake
- Water quality improvement
- Biodiversity net gain
- Market growth of >£11bn by 2030

It's not the **POTENTIAL** that's the challenge.

The CHALLENGE is the way that most of the world's seaweed is being grown...

EAGROWN

### LONGLINE seaweed farming

- Expensive & Labour intensive
- Needs sheltered waters, which are already crowded
- Potential for wildlife entanglement
- Cannot co-locate
- Cannot be used in sensitive areas e.g. SSSI, SACs, port approaches
- Lack of social license







Backlash against longline seaweed farming



Anger over seaweed farms off north Cornish coast





- EXCLUSIVE: Plans pulled for 55 hectare farms off Portscatho in Cornwall
- Locals feared it would destroy fishing and affect tourism to nearby beaches
- Nearby Carne Beach was once named the second best beach in the world

We need to THINK DIFFERENTLY to prevent the seaweed industry from being dead in the water, and ensure we are fighting our planet's problems in the most effective way possible.



We have developed a Comprehensive new solution





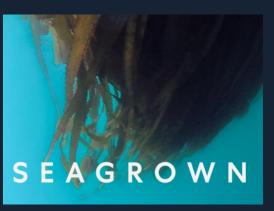
- Seaweed aquaculture reinvented: inwater, deck machinery, hatchery
- Can work offshore AND inshore at scale
- Can work with other marine industries
- Can be used by all sizes of workboat
- Can grow sustainable seaweed all year round

Innovated from start to end on the Yorkshire Coast









### Kelpedo gives SeaGrown the Capability to deliver

- Biodiversity Net Gain
- Nutrient uptake
- Carbon uptake
- Water quality improvement
- Habitat restoration
- IMTA (seaweed/shellfish)





# Kelpedo can help SeaGrown target the restorative power of seaweed right where it is needed...

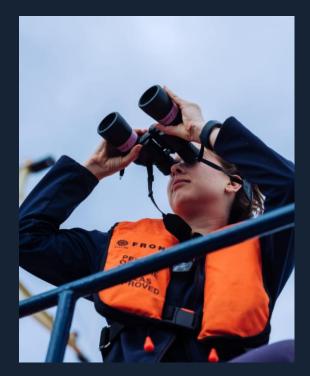
- In port, inshore, offshore
- In harmony with other marine activities
- In ecologically sensitive areas
- Scalable up or down

















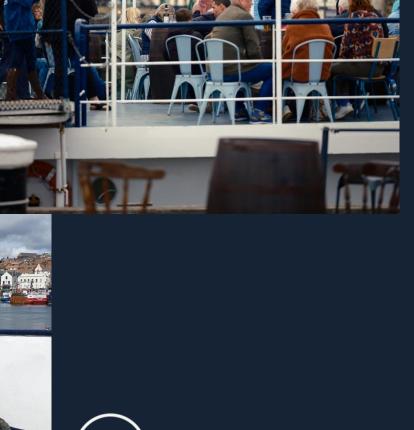
### Collaboration













### Collaboration









# Could KELPEDO overcome barriers to seaweed as a nature-based solution in the UK and beyond?

# YES!

- Move away from busy nearshore areas
- Enable coastal communities to take the initiative, improve ocean health and life opportunities.
- **Diversify** fishers into ocean health heroes, whilst increasing fish and shellfish stocks.
- Produce sustainable biomass at scale, without using power, freshwater, any chemicals or even any land









## Re MeMaRe Conference 2024

### **Investing in Restoration Session**

### Sarah Brown, SMEEF

Scottish Marine Environmental Enhancement Fund – Facilitating Business Engagement in Nature Restoration





# Scottish Marine Environmental Enhancement Fund

Enabling business to support impactful marine enhancement





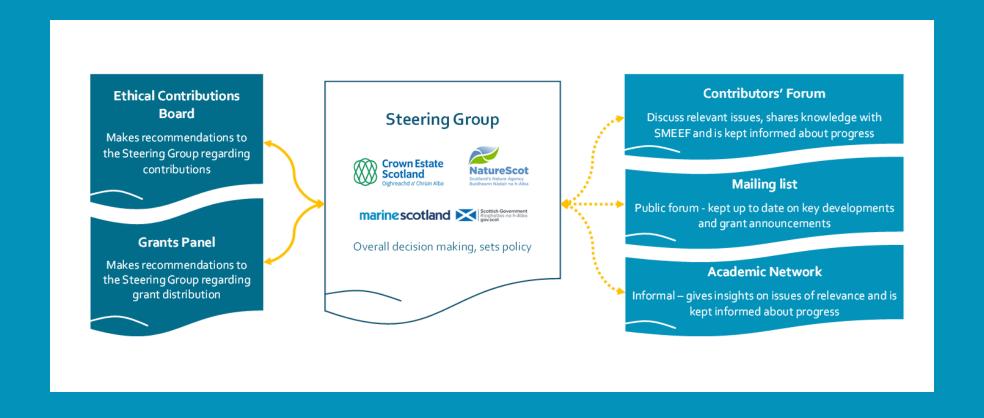
### From Ambition to Reality

- Started with a discussion between industry, politicians and eNGOs
- 18 months development prior to formal launch in May 2022
- £3.8m of grants to 54 projects to date
- First two Impact Reports <u>released</u>
- £2.1m seagrass programme underway
- Soon 'always open' fund availability
- Further c£2.5m under negotiation
- Seeking new donors!



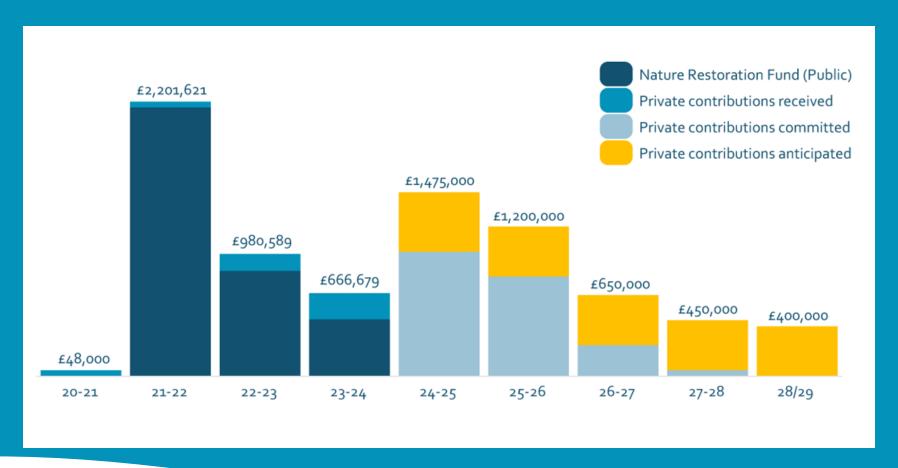


### SMEEF Decision Making Structures





### Sources of funding





### SMEEF funds impactful projects

Seabed – seagrass, native oysters and more

Coastal – saltmarsh, sand dunes and more

Marine – mobile species and deeper sea work

Research – filling strategic data gaps



**Seabirds** 

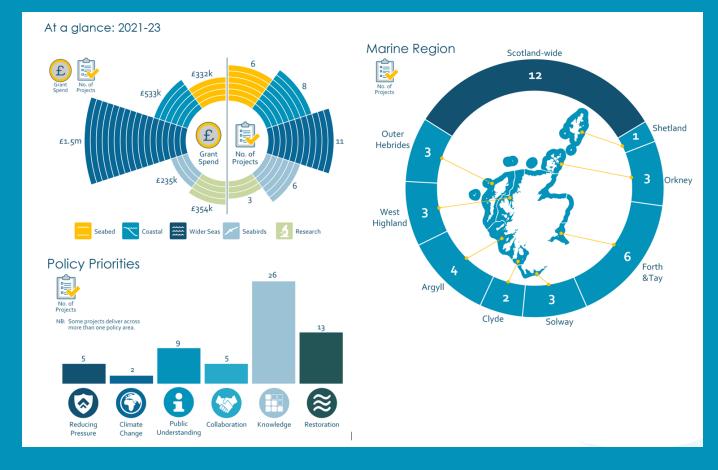


10% of donations are retained to cover core costs and administration

# Measuring Impact - £3.8m+ for Scottish marine enhancement









### Why do businesses donate to SMEEF

### Why give at all?

- To demonstrate positive corporate ethics as part of their CSR/ESG commitments
- To test out new approaches to marine enhancement

#### They give to SMEEF because...

- Of our offer of strategic delivery
- Reluctance of eNGOs and communities to be directly funded
- Transparency and accountability





### Contributions – Acceptance and Allocation

#### We aim to:

maximise donations to marine enhancement while providing the highest integrity for donors and grantees.

### **Due Diligence - Donors**

- Standard background checks to establish organisational viability
- Enhanced further than
   years if necessary
- Extended Scope 1, 2 and 3 emission reductions and Just Transition plans.

### Due Diligence – Grantees

- Credible proposals
- Expert Grants Panel
- Appropriate governance
- Support and advice
- Regular reporting
- Networking and collaboration



# To learn more about this **award winning** marine enhancement nature finance programme

Please contact Sarah Brown, manager@smeef.scot, 07717 571762

www.SMEEF.scot







### Thank you to SMEEF Contributors!

#### Core funding and donors

Core funding comes from Crown Estate Scotland, Scottish Government's Marine Directorate and NatureScot (in-kind/hosting). In addition, SMEEF would like to thank the following corporate donors:

20/21	Red Rock Power Limited Vattenfall Wind Power Limited Scottish Power Renewables (UK) Limited Ocean Winds UK Limited
21/22	EDF Energy Renewables Limited SB Offshore Energy Limited UK Mainstream Renewable Power Limited Simply Blue Energy (Scotland) Limited RWE Renewables UK SSE Renewables Services (UK) Limited Offshore Wind Power Limited
22/23	Scottish Power Renewables (UK) Limited Orsted Power (UK) Limited Stromar Offshore Wind Farm Limited
23/24	Simply Blue Energy (Scotland) Limited Muir Mhor Offshore Wind Farm Limited Bellrock Offshore Wind Farm Limited Broadshore Offshore Wind Farm Limited Scottish Power Renewables (UK) Limited Scottish Hydro Electric Power Distribution Limited
24/25	Ossian Offshore Wind Farm Limited Stromar Offshore Wind Farm Limited



































# Re MeMaRe Conference 2024

### **Investing in Restoration Session**

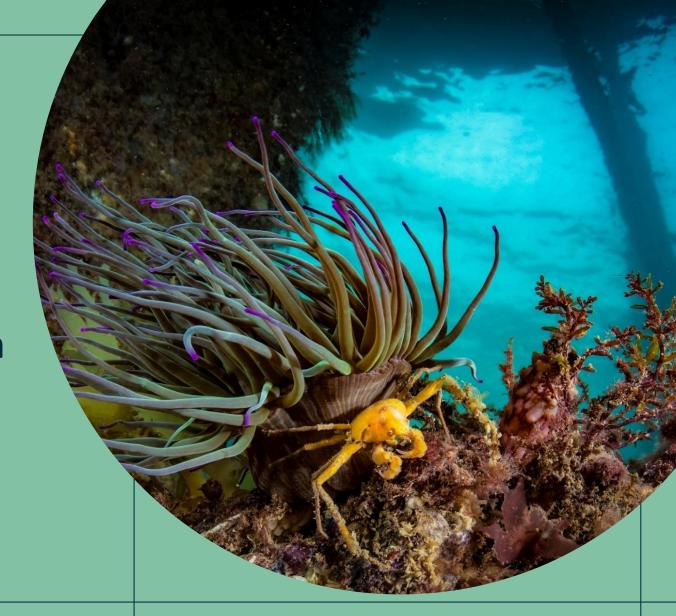
## Caroline Price, The Crown Estate

Unlocking Investment - A Roadmap for High-Integrity Marine Natural Capital Markets in the UK





Unlocking Investment – A
Roadmap for High-Integrity
Marine Natural Capital Markets in
the UK



**ReMeMaRe Conference 2024** 



# THE CROWN ESTATE

Dating back more than 260 years, The Crown Estate is a unique business with a diverse portfolio that stretches across England, Wales and Northern Ireland



#### **Established by The Crown Estate Act of 1961**

As an independent commercial business with accountability to Parliament.



#### Return our net revenue profit to the Treasury

For the benefit of the nation's finances, with £3bn generated in the last 10 years.



#### Active owners and managers of land and seabed

We are one of the UK's largest landowners, with some of the nation's most remarkable places and spaces. We seek to leverage our scale and convening power to make a meaningful difference.



#### Guided by a compelling purpose

To create lasting and shared prosperity for the nation



#### **Delivering an ambitious strategy**

Guided by our purpose and informed by major trends impacting our business, we seek to create broad financial, environmental and social value for our stakeholders, customers and the nation.









THE CROWN ESTATE







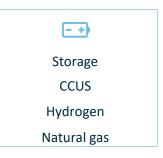


CROWN ESTATE

# As custodian of the marine environment, we play a leading role in sustainable development are work in partnership with others to create lasting environmental and social value for the nation



Energy
Offshore wind
Energy conversion
Marine energy

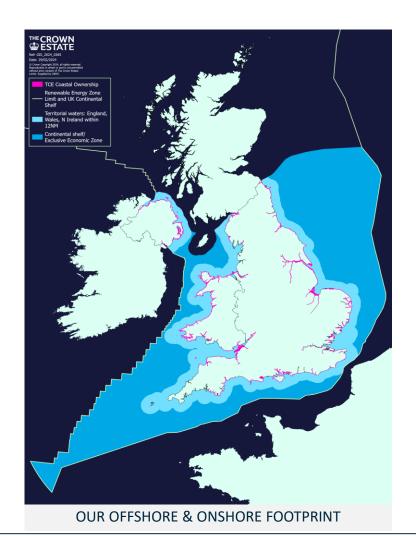


Infrastructure
Power & Telco Cables
Pipelines









#### **OUR STRATEGIC PRIORITIES**



Supporting the UK towards a net zero carbon and energy-secure future



Helping create thriving communities & supporting equality, economic growth and productivity

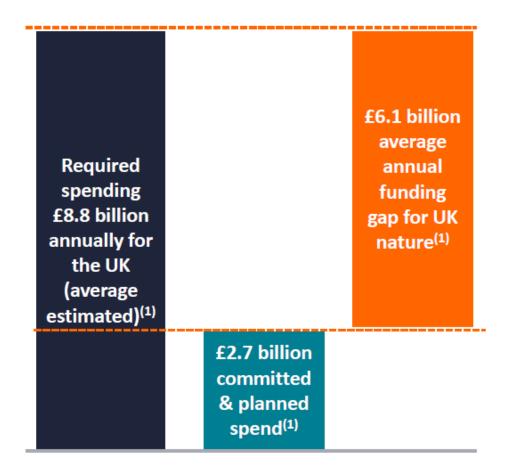


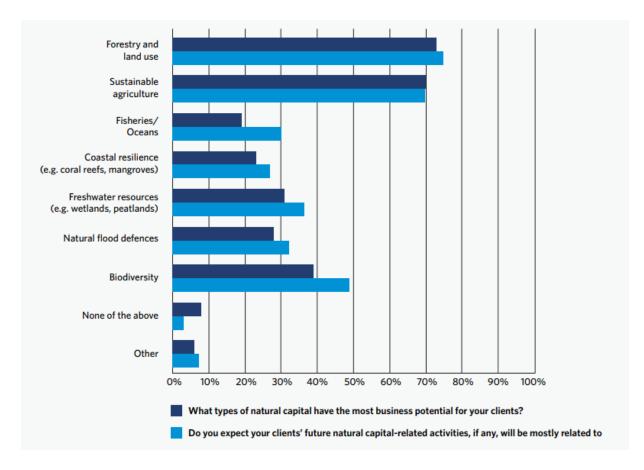
Taking a leading role in stewarding the UK's natural environment and biodiversity



Responsibly generating value and financial returns for the country

We know that the funding gap for restoration and recovery is large – and unlocking private finance could help drive progress –investment trends indicate appetite, but marine lags behind terrestrial



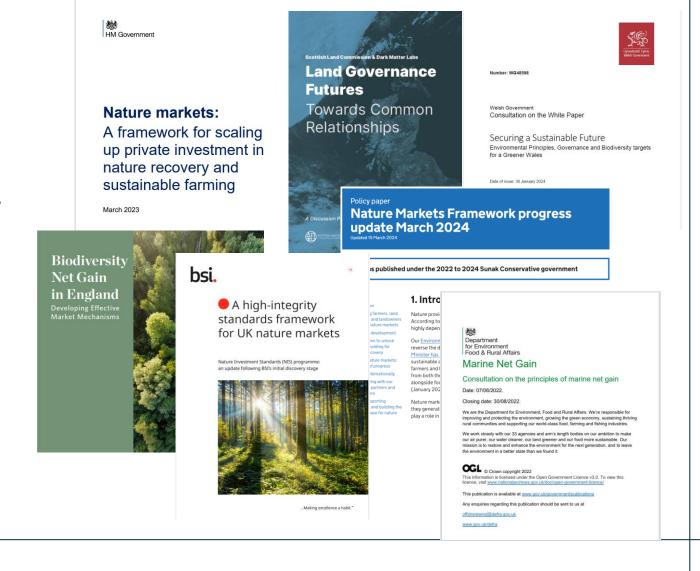


 $<sup>^{\</sup>mathrm{1}}$  GFI, eftec, Rayment Consulting (October 2021).The Finance Gap for UK Nature

<sup>&</sup>lt;sup>2</sup> The Nature Conservancy, Investing in Nature – Private finance for nature-based resilience (2019 review)

### Natural Capital Markets (NCM) in the UK – progress to date

- NCM (or nature markets) offer mechanisms by which the services provided to society by natural systems can be financially captured
- Market mechanisms built in the correct way can help increase investment by decreasing uncertainty, spread risk and accelerate progress
- High integrity frameworks are key no greenwashing!
- Progress in the UK has focussed on the terrestrial space, accelerated by compliance driven activity such as BNG



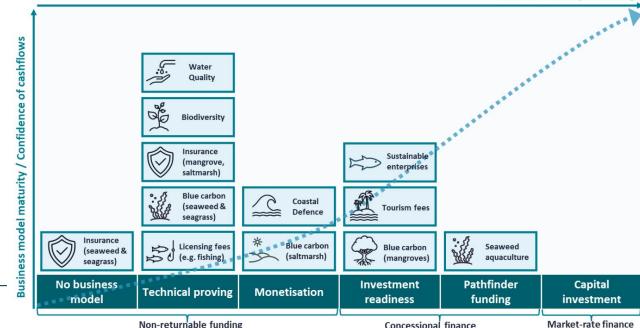
### Marine Natural Capital Markets

- Opportunity in the UK to set the benchmark for equitable, transparent, high-integrity and standardised markets for marine natural capital to help reverse the decline in the UK's marine natural capital.
- Increased interest and activity around this theme however still in nascent stages – limited coherence and clarity on how they could work.
- High Integrity Marine Natural Capital Markets Roadmap initiative -build cross-sector and stakeholder consensus
- Phase 1: Engagement with range of stakeholders to identify a consensus view on critical barriers and solutions



Web Version

**Business development stage** 











### Barriers to High-Integrity Marine Natural Capital Markets (HIMNCM)

#### **Financial**



Investor confidence and understanding



Revenue stream challenges to scale marine natural capital markets



Complexity of marine ecosystems



Limitations in public funding

#### Science



Uncertainty around habitat extent and condition



Conservation and restoration efficacy



Lack of cross sector dialogue

### **Policy**



Lack of demand drivers



Lack of consensus on framework to monetize marine natural capital



Lack of supporting policy and market infrastructure for blue carbon in the VCM



Marine spatial planning lacks a natural capital lens



Evolving approval process for marine natural capital projects



Lack of government resources for technical capacity building









# Proposed solutions for each barrier, drawing on discussions with stakeholders from science, academia, policy, finance & eNGO communities

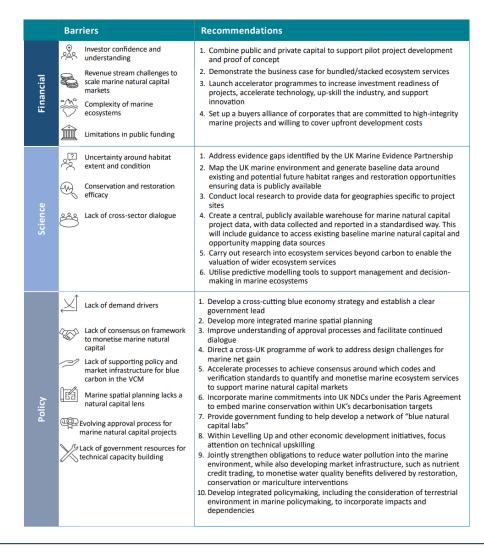












#### CASE STUDY 1: Code fragmentation and lack of funding – the UK Saltmarsh Carbon Code

#### **Barriers**



Projects need blended finance sources to become financially viable and investable



Variation in carbon sequestration rates across saltmarsh sites in England



Lack of understanding and awareness from stakeholders on the benefits of saltmarshes



Additionality risk

#### Solutions



Improved and increased data collection on carbon sequestration potential of saltmarsh sites across the UK to ensure robust scientific data underpinning a Code



Demonstrate the business case for bundled and stacked ecosystem services, especially public grant funding



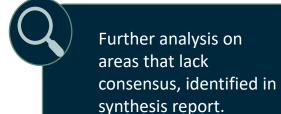
Accelerate development of existing codes and standards

#### Project Description

Saltmarshes can play an effective role in climate change mitigation by trapping and storing carbon dioxide, as well as an important role in coastal defence and habitat creation. A project was launched to bring together key stakeholders to determine what type of code or standard development was needed to direct more finance into saltmarsh restoration and creation. The project secured a £100,000 grant from Defra's NEIRF initiative. Through the project, various gaps and barriers have been identified such as the need for public funding for the saltmarsh restoration projects to become financially viable, the variation in carbon sequestration rates across saltmarsh sites in England, and community concerns around managed realignment projects. Stakeholders have expressed reservations that saltmarsh restoration brings the sea closer to communities, creating a perceived increased risk of flooding. Further education and awareness raising is needed to showcase the benefits of natural sea defences, e.g., that they can result in avoided infrastructure costs, livelihood impacts, as well as reduced maintenance costs for sea defences.

### HIMNC Roadmap Initiative—Phase 2

HIGH INTEGRITY
MARINE NATURAL CAPITAL
MARKETS IN THE UK
A ROADMAP FOR ACTION









Identify learnings from other countries and explore how the UK can be a pioneer.



Highlight projects under development to show opportunity for investment.





Build consensus and stakeholder buy-in around recommended actions and roles in a detailed roadmap.















### HIMNCM Roadmap Initiative – Engagement was key!

**UK Steering Group** 

















































**Swiss Re** 















**SRUC** 

















Shellfish



**NatureScot** 

**NàdarAlba** 











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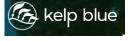












**University of Brighton** 



**NORTHERN IRELAND** 











Association of Great Britain















HIGH INTEGRITY MARINE NATURAL CAPITAL MARKETS IN THE UK A ROADMAP FOR ACTION

Developed by: finance earth











Web Version

#### BARRIER RECOMMENDATION

Lack of consensus on prioritisation of target areas and approved methods for habitat conservation and restoration

Limited track record of pilot

projects to prove efficacy of

Lack of demand drivers and

obligations to pay for marine

Nascent and fragmented nature

of existing marine codes and

insufficient funding for their

Key data and evidence gaps

including extent and condition

of habitats, impacts of human

overlapping depositories, is often

poorly managed and organised

There is currently a shortage of

marine natural capital projects

key skills and knowledge to deliver

and can be of varying quality

activities and benefits from

ecosystem services

Data is held in multiple

and at scale

ecosystem services

development

restoration methods, revenue

streams and the business case for marine and coastal ecosystem services and lack of systematic monitoring over the long term to define successes and failures



#### RECOMENDATION 1

Identify priority opportunities and approved methods for marine and coastal conservation and restoration



#### RECOMENDATION 2

Deliver seascape-scale natural capital projects through combined public and private funding



#### RECOMENDATION 3

Implement policy and regulatory requirements to drive demand for marine natural capital



#### **RECOMENDATION 4**

Accelerate the development of UK-wide codes for marine and coastal ecosystem services



#### RECOMENDATION 5

Address critical evidence gaps for the development of marine natural capital markets



Develop publicly accessible and standardised approaches to data collection, hosting and monitoring



Build the necessary skills and capacity to harness marine natural capital opportunities

_			
	YEAR	ACTIONS	LEAD STAKEHOLDERS <sup>21</sup>
	2025	Identify clear government leads to agree on priority areas for marine and coastal protection and restoration	Governments
		Collate existing opportunity mapping initiatives	Governments, Landowners, Third Sector
		Progress ongoing marine spatial planning processes including greater consideration of natural capital in decision making	Governments
	2026	Identify near-term priority areas for conservation and restoration projects	Governments, Landowners, Third Sector, Academia, Private Sector
		Engage communities to confirm support for spatial prioritisation and iterate priority areas based on feedback	Governments, Private Sector, Landowners, Third Sector
	2027	Publicly communicate opportunity mapping of priority areas for conservation and restoration	Governments, Third Sector
$\setminus$		Collate, approve and promote restoration methods published in a "library" of methods	Governments

YEAR	ACTIONS	LEAD STAKEHOLDERS
2025	Conduct a data audit to identify existing decision-useful data, responsive to private sector requirements and clarify remaining priority data gaps	Third Sector, Governments, Academia: UKBCEP, UK Blue Carbon Forum, Scottish Blue Carbon Forum, Seascape Restoration Network, Governments, Universities
2026	Deliver research funding with clear requirements to contribute to a shared evidence base while preventing duplication of data	Private Sector, Governments: Academic Grant Funders
	Structure leasing requirements to collect natural capital data and contribute to a shared evidence base	Landowners
2030	Deliver multi-disciplinary research to address key evidence gaps, prioritising needs articulated by the UKBCEP and supporting opportunity mapping	Third Sector, Governments, Academia: UKBCEP, Governments, Universities







#### RECOMMENDATION 1

Identify priority opportunities & approved methods for marine & coastal conservation & restoration



#### RECOMMENDATION 2

Deliver seascape-scale natural capital projects through combined public & private funding



#### RECOMMENDATION 3

Implement policy & regulatory requirements to drive demand for marine natural capital



#### **RECOMMENDATION 4**

Accelerate the development of UK-wide codes for marine & coastal ecosystem services



#### **RECOMMENDATION 5**

Address critical evidence gaps for the development of marine natural capital markets



#### RECOMMENDATION 6

Develop accessible, standardised approaches to data collection. hosting & monitoring



#### RECOMMENDATION 7

Build the skills & capacity to harness marine natural capital opportunities

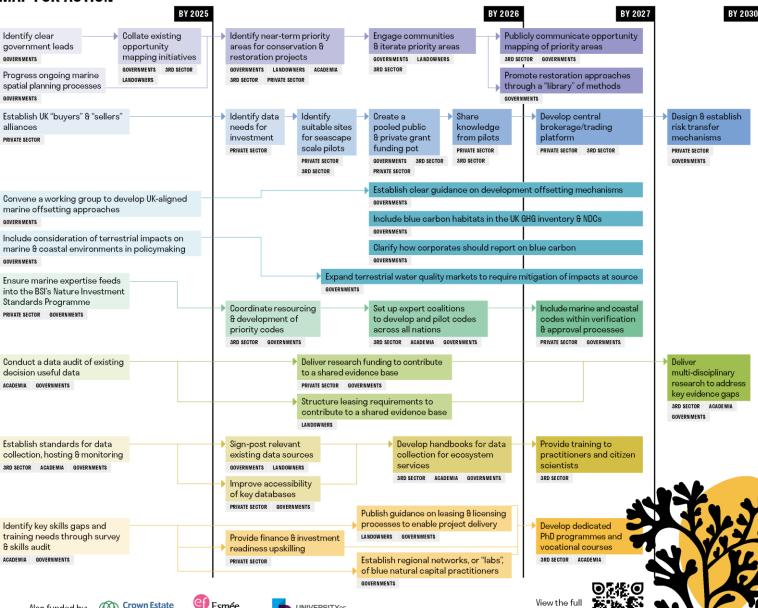














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### HIMNCM – What next?

- Multiple actions underway progressing many of the recommended areas
- Aim to continue coordination across the UK to help drive synergies whilst recognising specific context of each nation
- Promote complimentary activities by sharing knowledge and raising awareness of relevant workstreams (minimise duplication)
- Seek to track [report on?] progress over time and share updates to interested stakeholders
- Continue to work in collaboration with diverse stakeholders to build on progress made so far
- We look forward to your partnership in developing HIMNCM in the UK!



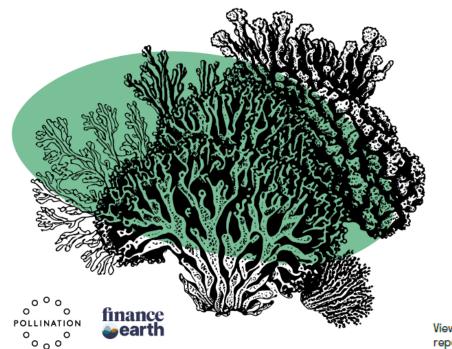








HIGH INTEGRITY
MARINE NATURAL CAPITAL
MARKETS IN THE UK
A ROADMAP FOR ACTION





## Re Me Ma Re Conference 2024

### **Investing in Restoration Session**

Peter Barham, Strategic Net Gain
Task and Finish group and SUDG
How can we ensure that the statutory obligation of
delivering Net Gain as part of development can
have the best outcome for coastal and marine
recovery and restoration?





# Net Gain: A major opportunity for marine restoration



## ReMeMaRe Conference, Scarborough

Peter Barham
Chair, Seabed User and Developer Group
www.sudg.org.uk

### **Current situation**

- Environment needs protecting and improving
  - CLIMATE CRISIS
  - BIODIVERSITY CRISIS

We need to address both.

- Marine industries make a significant contribution to:
  - The UK economy
  - Addressing Climate and meeting Net Zero
  - Huge opportunity to assist recovery





### **Current situation**

- Marine industries have universally welcomed net gain
- Marine industries have strong experience in delivering environmental solutions
- We must learn to distinguish between compensation and net gain
  - Differing legislation
  - Net gain as a real opportunity
- Net Gain Regulation should be proportionate and targeted to deliver real restoration and recovery





### **Net Gain and SUDG - where are we?**

- Biodiversity net gain (BNG)
  - Down to mean low water became a statutory obligation in February
  - Complex metric
  - Early days little experience
  - Need to share experience and good practice

We need innovation not restrictive bureaucracy





### **Net Gain and SUDG - where are we?**

# Seabed User

### Marine Net Gain

- Still being developed
- Defra commissioning work
  - Possible frameworks
  - Economic aspects/opportunities
- Simpler metric?
- Agreed targets



## Strategic targets for net gain

- Funded by OWEC
- Task and Finish Group
  - SUDG, RSPB, Wildlife Trusts, NE, Defra,
     TCE

### **Outputs**

- 1. widely agreed targets based on:
  - Calls for evidence
  - Recognised failures eg MSFD
- 2. how can existing experience help in delivering targets

**Next steps:** local 'pilot studies' East marine plan area.



### **Net Gain – where are we now?**

- Marine industries support net gain
  - We need to maintain that positive support
- Net gain should be a real opportunity to help deliver restoration
  - Huge financial contribution to deliver real targets
  - Not packages of 'greenwash'
- Best done through innovation, not complex regulation
- Better to collaborate on how to plan and deliver net gain





The importance of partnership working



SUDG industries are critical to marine and UK economy

- Seabed User
- The environment needs protecting, but also needs restoring
- Industry can help through net gain and delivery of agreed strategic targets
- Use these targets to determine direction and delivery of net gain
- We need actions for conservation not complex regulation
- We will do more if we all work together and in partnership with initiatives such as ReMeMaRe



# Re MeMaRe Conference 2024

Panel Discussion, Chair: David Tudor

- Henrietta Stock, Aviva
- Laura Robinson and Wave Crookes, Seagrown
- Sarah Brown, Scottish Marine Environmental Enhancement Fund
- Caroline Price, The Crown Estate
- Peter Barham, Strategic Net Gain Task and Finish group and SUDG

Slido for extra questions
QR code or www.slido.com

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