Why Set Net Positive Impact Targets In Offshore Wind = Ecosystem Service Targets For Restoration?

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Introduction

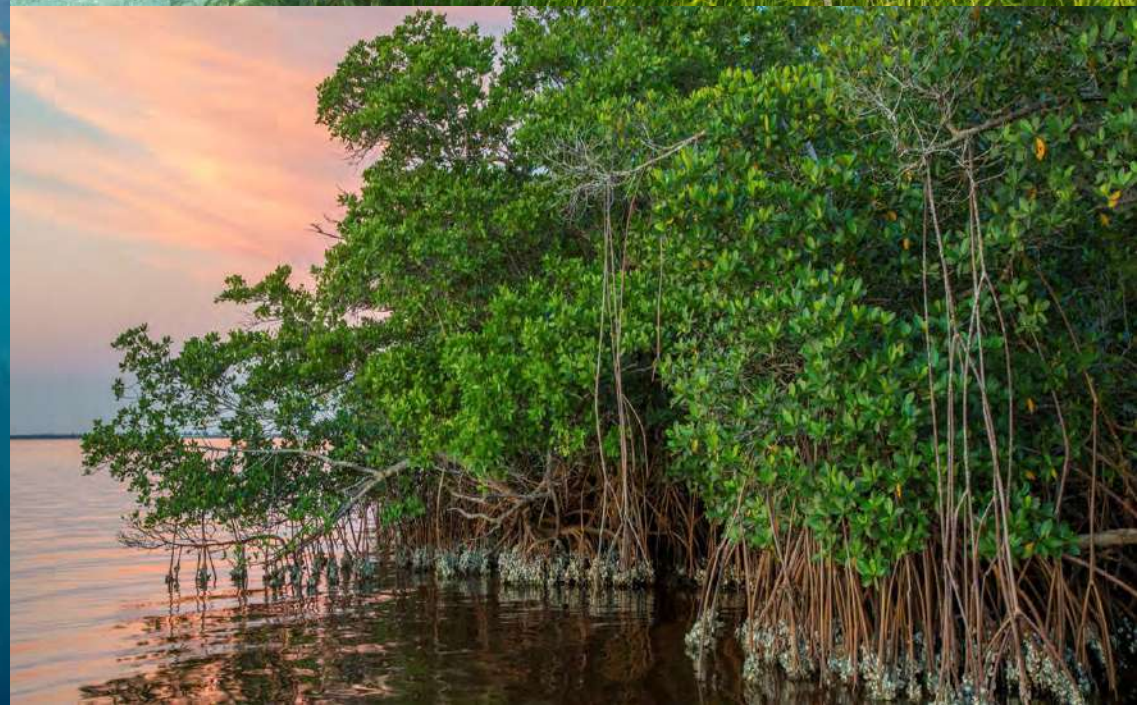
20 Years restoring marine habitats

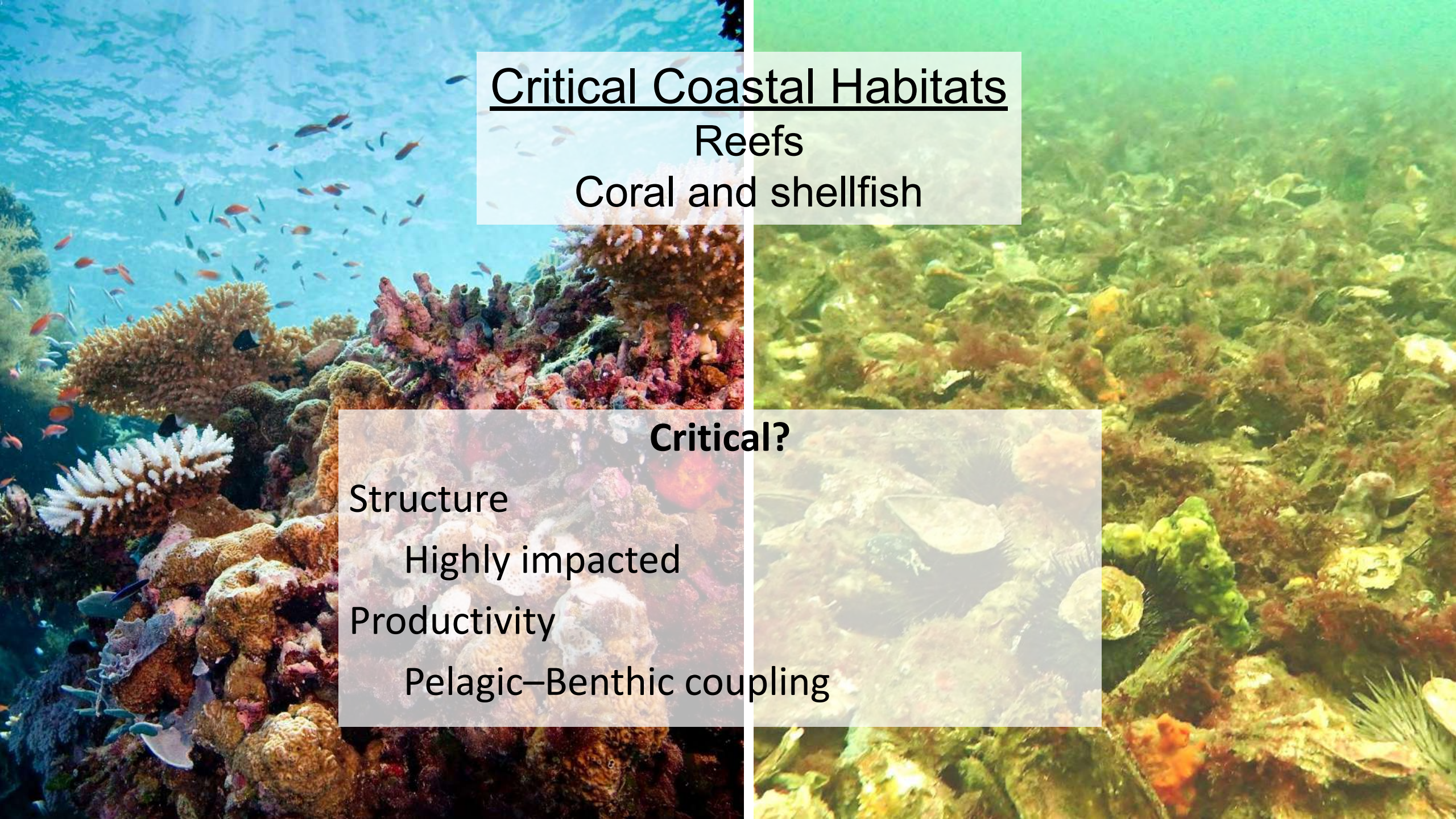
Critical Coastal Habitats

- Which ones?
- Why critical?
- Relevance to OSW?

Critical Coastal Habitats

Salt marsh, Seagrass, Mangroves, Giant Kelp





Critical Coastal Habitats

Reefs

Coral and shellfish

Critical?

Structure

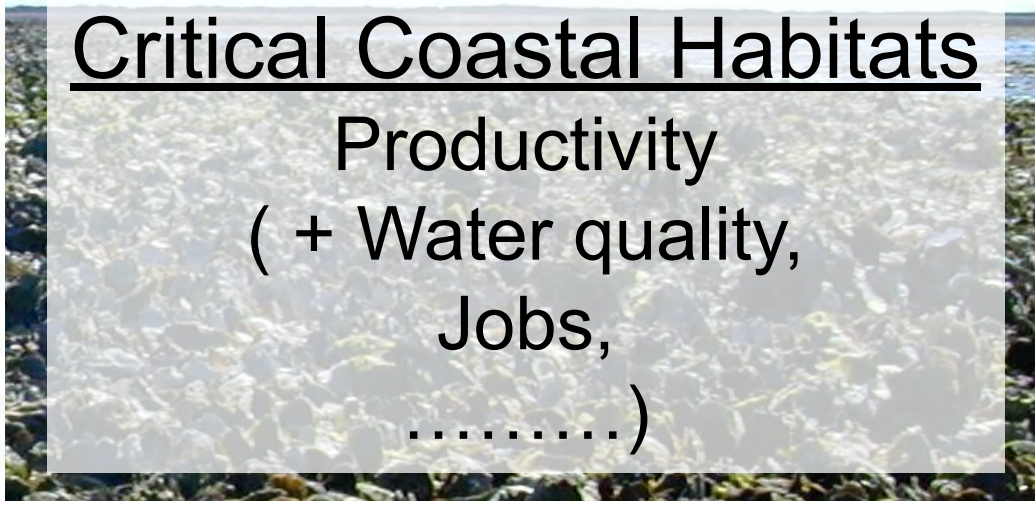
- Highly impacted

Productivity

- Pelagic–Benthic coupling

	Non-restored		Restored	
	Abundance (# m^{-2})	Biomass (g m^{-2})	Abundance (# m^{-2})	Biomass (g m^{-2})
Amphipods	341	0.26	7,067	3.53
Anemones	0	0.00	894	4.96
Barnacles	0	0.00	3,770	110.69
Clams	1,456	10.78	481	57.75
Crabs (Xanthid)	6	0.25	218	87.46
Fish	11	0.28	141	18.62
Mussels	13	0.19	1,563	2,279.20
Oysters	0	0.00	131	15,422.15
Shrimp	3	0.03	35	1.49
Worms (Polychaete)	435	0.36		

Kellogg et al 2013 zu Ermgassen et al 2016



Critical Coastal Habitats

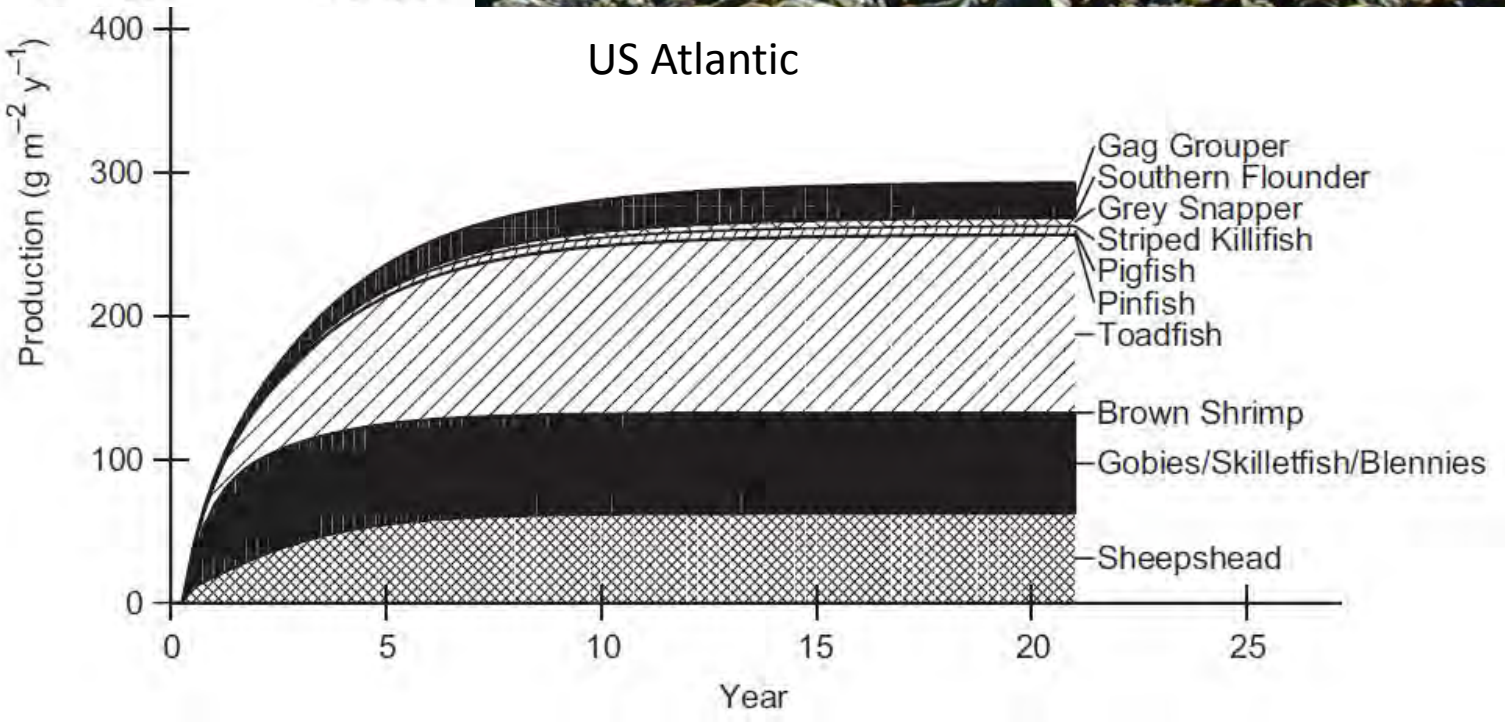
Productivity

(+ Water quality,

Jobs,

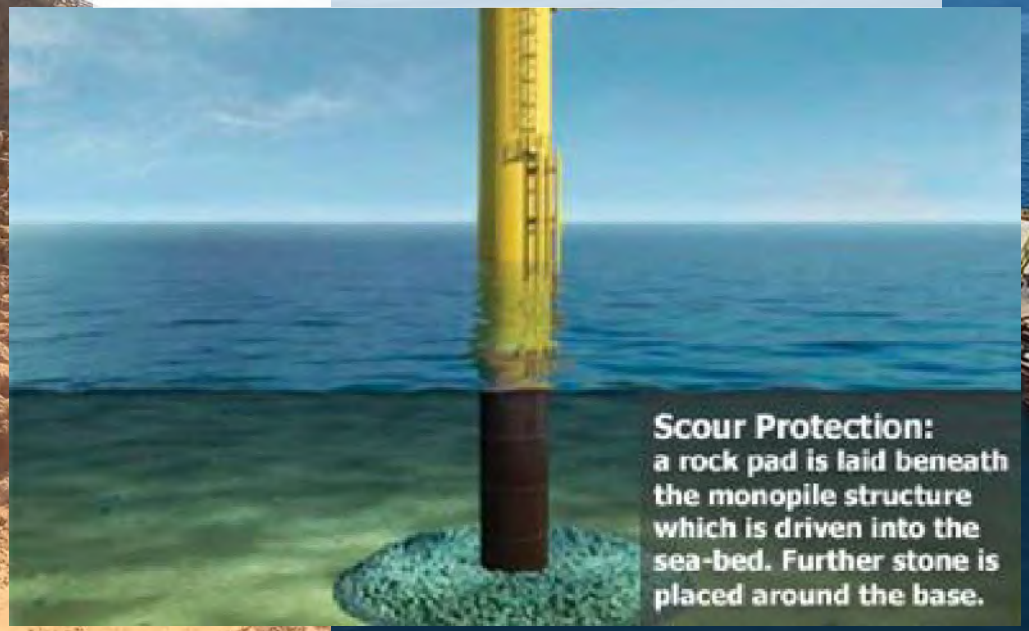
……)

US Atlantic



Restoring An Oyster Reef

Scour protection



Restoring An Oyster Reef


THE PISCATORIAL ATLAS.
(Olsen 1883)
SHETLAND ISLES
ORKNEY ISLES
NORWAY
SKAGERAK
GREAT FISBER BANK
DOGGER BANK
DENMARK
HOLLAND
GERMANY
BELGIUM
FRANCE
ENGLAND
SCOTLAND
WALES
IRELAND
BRISTOL CHANNEL
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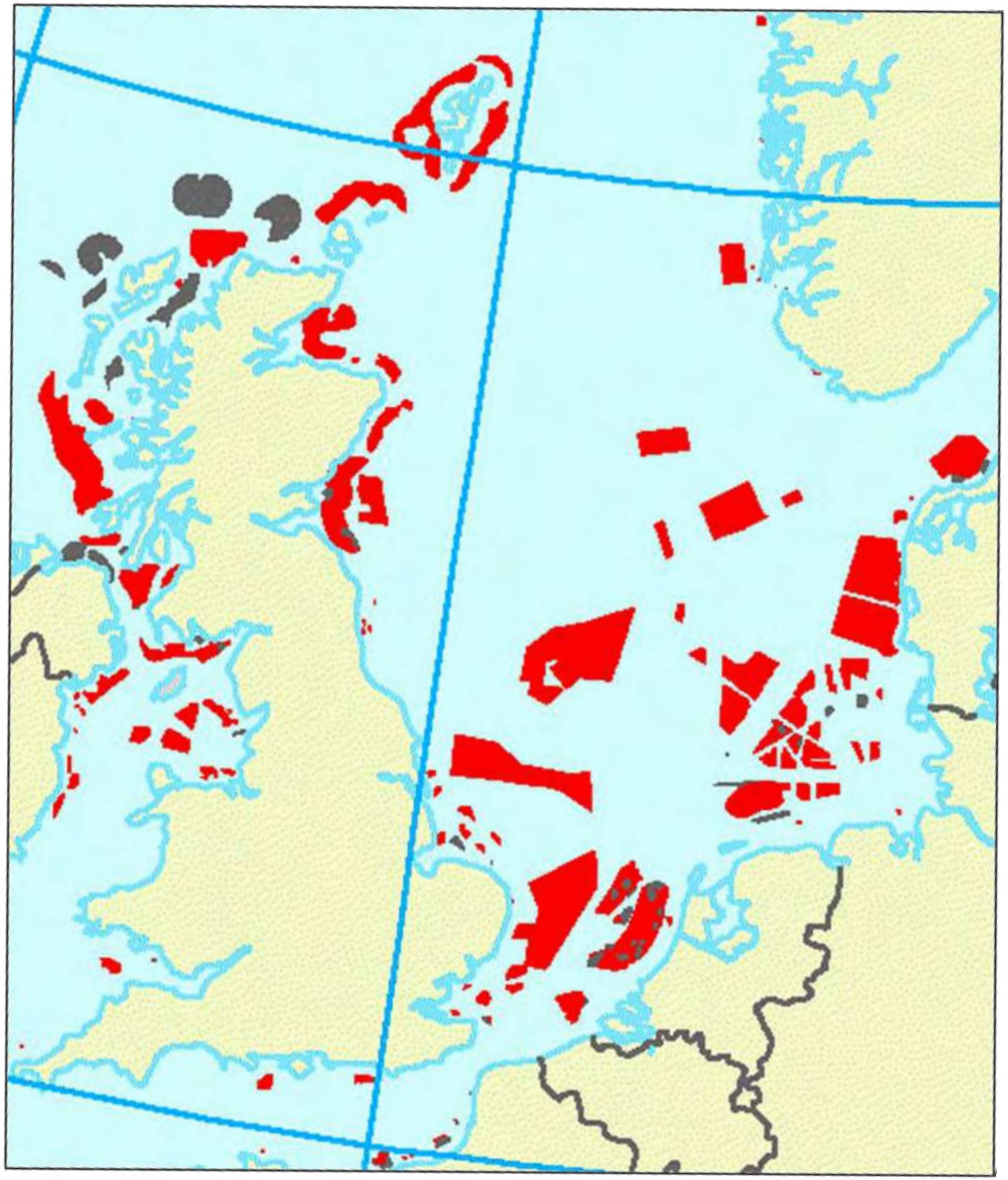
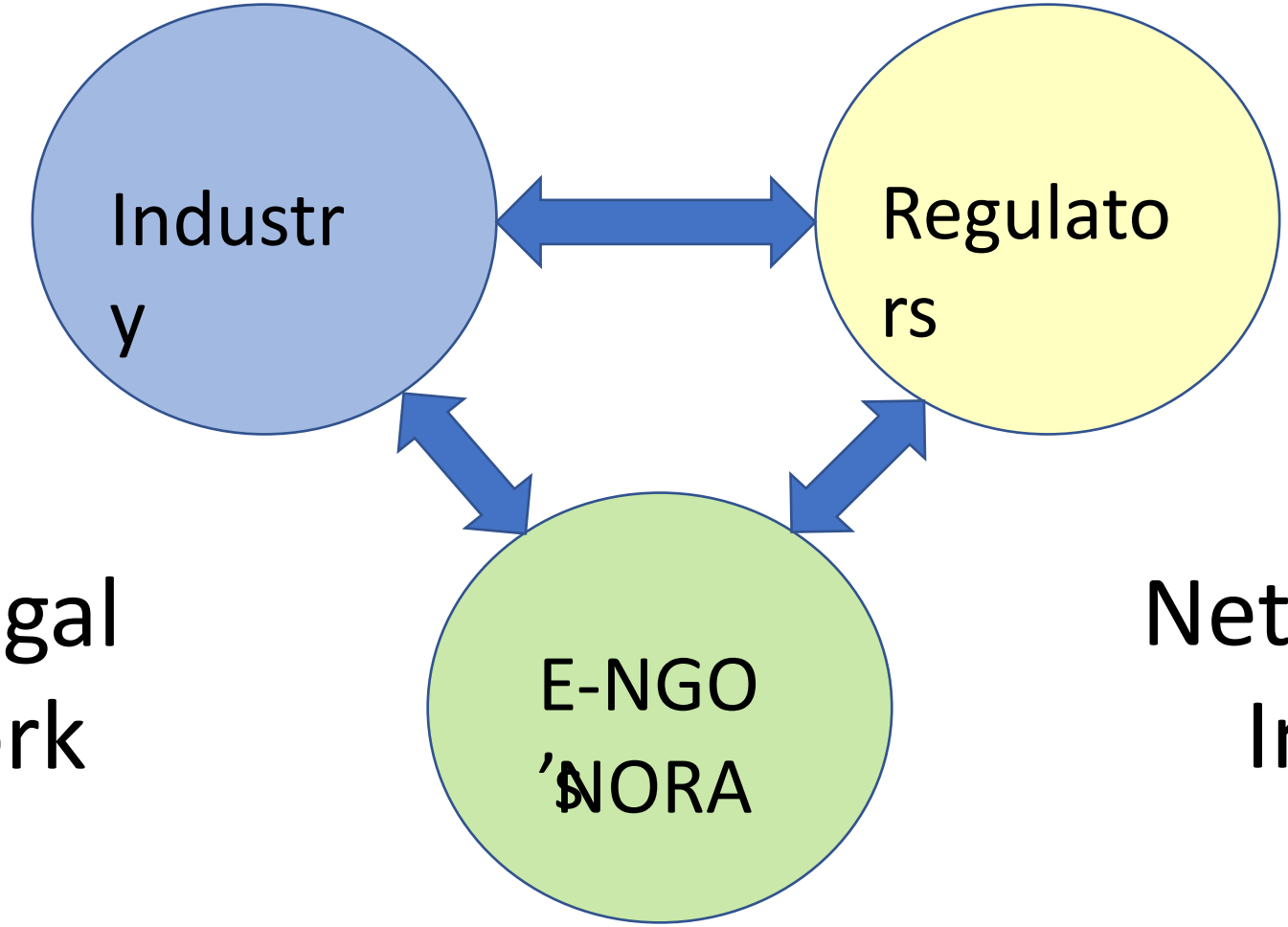


Implementation Partner
Scale

Approve Rest. Plan
Waive Decommissioning Rock



Policy / Legal
Framework

Net Positive
Impact

Develop Rest. Practice
Establish success metrics