THE VALUE OF DESTORED UKSEAS

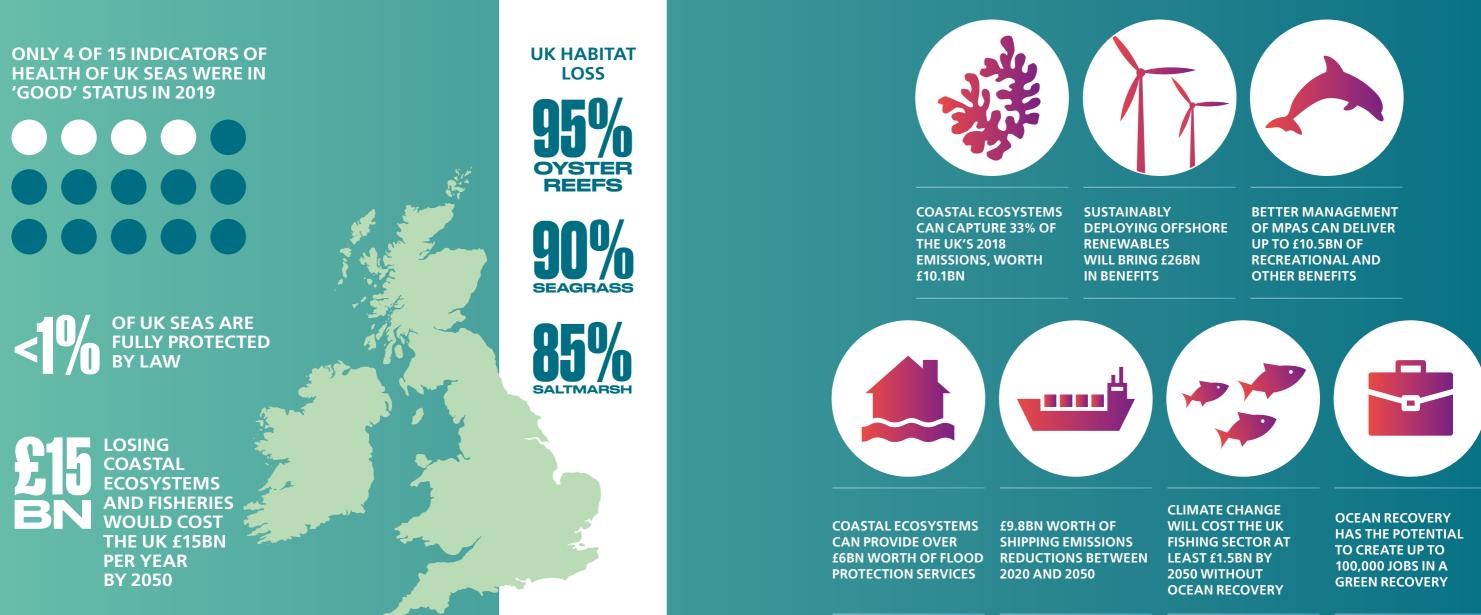
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THE COST OF BUSINESS AS USUAL

THE BENEFITS OF **OCEAN RECOVERY**



This report summarises the headline results and policy recommendations from the Value of Restored UK Seas project. A full description of the project objectives, methodology, results and conclusions is provided in the accompanying Technical Annex.

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EXECUTIVE SUMMARY

As an island nation, the UK's seas are part of our identify and our culture. Their natural beauty and amazing wildlife are a source of wonder, inspiration, recreation and wellbeing for millions. They also have huge economic value: the UK government estimates that maritime activities including tourism, shipping, fisheries and renewable energy contribute £47 billion to the British economy annually.

But our seas are in trouble. Fishing, pollution and climate change are putting increasing pressure on marine ecosystems, jeopardising their future. In 2019, **our seas failed to meet government standards on good environmental health against 11 out of 15 indicators**, including those relating to birds, fish and seabed habitats.

Sky Ocean Rescue and WWF are campaigning for a new 10year vision and action plan for UK ocean recovery. Bringing our oceans back to life is crucial for our climate and biodiversity targets, but it's also a sound economic investment. Taking action now to put UK seas on a path to recovery will bring additional benefits worth **at least £50 billion by 2050**, against an estimated cost of £38 billion. It also has the potential to create **over 100,000 full-time job**s, mostly in renewable energy, as we seek to rebuild after the Covid-19 pandemic.

A HOLISTIC APPROACH

Rather than tackling issues in isolation, ocean recovery requires a holistic approach. We want to see action based on four key pillars:

- Restoring lost coastal ecosystems
- Fully protecting a third of UK seas
- Making fisheries and seafood production nature and climate positive
- Supporting net-zero climate action.

By taking action on these four pillars together, we can make the most of synergies and positive feedback loops: improving marine protection, for example, can help restore ecosystems, replenish fisheries and reduce carbon emissions.

Our study attempts to value the economic benefits of an "ocean recovery" scenario based on ambitious action in these four areas between now and 2050, compared to what would happen if current trends continue. But these values are an underestimate: we haven't attempted to model all the potential benefits, and of course it's impossible to assign an economic value to the joys and delights our seas give us.

These things are priceless.



Sky Ocean Rescue and WWF are working together to help protect and restore our ocean. Together we're campaigning for ocean recovery as the foundation for the next decade, inspiring millions to become Ocean Heroes and take real action to save our ocean. By taking action for ocean recovery, we can restore life to UK seas for people, climate and nature with abundant marine wildlife, habitats healthy and recovering, and human pressures on our ocean reduced, from fishing to pollution. Join the fight at wwf.org.uk/oceanhero



RESTORING LOST COASTAL ECOSYSTEMS

Coastal habitats like seagrass meadows, saltmarshes and kelp forests store carbon, buffer us against floods and storms, and provide nursery grounds for commercially important fish species. But their continued loss and degradation undermines their ability to provide these vital services.

Marine habitats capture up to 20 times more carbon per hectare than forests on land. Fully restored, our coastal ecosystems could capture a third of the UK's emissions from 2018. Restoring and stopping deterioration of coastal ecosystems - tripling the area of seagrass and increasing the area of other habitats by 15% - could prevent the loss of almost 40 million tonnes of carbon dioxide equivalent (MtCO2e) and store a further 137 MtCO2e by 2050, equivalent to the emissions from 86,000 long-haul flights. This would have a net economic benefit of £10.1 billion by 2050 - which would increase further in the future as the protected and restored habitats continue to accumulate more carbon.

Protecting and restoring these habitats could save an estimated £6.2 billion in spending on artificial flood defences by 2050. It would also add value to fisheries, and provide jobs in the restoration work itself.

NATURE AND CLIMATE POSITIVE FISHERIES AND SEAFOOD

Unsustainable fishing is one of the biggest threats to the marine environment and the future of the fishing industry itself. Currently, a third of UK stocks are overfished, reducing their long-term economic value. Climate change is also having a major impact, and is expected to cost the sector an estimated **£1.5 billion** by 2050. Ocean recovery offers an opportunity to move towards fisheries that are good for climate and nature - including by reducing overfishing, improving fishing practices, and swapping diesel fuels for more efficient electric engines.

Today, the UK fishing industry has an estimated value of £989 million and supports around 12,000 full- and part-time fishers. Rebuilding fish stocks to their maximum sustainable yield could allow the UK to land an extra 442,000 tonnes of fish every year, worth £440 million, and support an additional 6,600 jobs.

Rebuilding fish biomass has climate benefits too, as fish capture a surprising amount of carbon – this could be worth up to **£61.7 million by 2050**, while fuel efficiency gains in the UK fishing fleet could provide carbon savings worth £98 million.

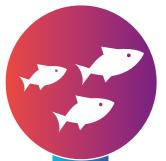
WELL-MANAGED NETWORK OF MPAS A well-designed and effectively managed network of marine protected areas (MPAs) isn't just important for wildlife: it supports key sectors like tourism and recreation, safeguards habitats that store carbon, and enables fish stocks to replenish. Today, MPAs cover about a quarter of UK seas, but many are little more than "paper parks", allowing even the most destructive types of fishing like bottom trawling. Extending full protection to 30% of our seas would yield multiple benefits, yielding net gains estimated at £10.5 billion and supporting up to 12,000 jobs in the tourism and recreation sector alone. Reduced trawling in these areas would also allow habitats to recover and capture carbon emissions worth an additional £459 million by 2050. Growing the populations of large marine mammals also supports carbon capture.

FULLY PROTECTING A THIRD OF UK SEAS THROUGH A

Fully protected areas that exclude fishing (also called "no-take zones") are also, counterintuitively, good for the fishing industry: studies have shown they can increase fish biomass by 600% and species richness by over 20% compared to unprotected areas nearby, which benefits fisheries as shoals spill out into the wider marine environment.

Our seas have a crucial role to play in bringing the UK's net carbon emissions down to zero. Stepping up marine renewable energy is particularly vital. Increasing offshore wind capacity by 40GW by 2030 and 75GW by 2050, in line with net-zero commitments, would deliver savings in carbon emissions valued at £26 billion compared with a business-as-usual scenario. This level of offshore wind generation could also create 67,000 jobs along with 16,200 jobs in tidal power and 12,000 jobs in wave power. Careful planning and deployment is vital to ensure marine renewables don't undermine the other pillars of ocean recovery: habitat restoration, well managed marine protected areas and sustainable fishing.

Shipping is another area where we need to increase ambition to achieve net zero. In 2017, greenhouse gas emissions from UK shipping were 13.8MtCO2e - about 3% of total UK emissions. Halving emissions by 2050 through increased efficiency and alternative fuels would deliver carbon savings worth £9.8 billion.



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SUPPORTING NET-ZERO ACTION



SKY OCEAN RESCUE AND WWF ARE WORKING TOGETHER TO HELP PROTECT AND RESTORE OUR OCEAN. TOGETHER WE'RE CAMPAIGNING FOR OCEAN RECOVERY AS THE FOUNDATION FOR THE NEXT DECADE, INSPIRING MILLIONS TO BECOME OCEAN HEROES AND TAKE REAL ACTION TO SAVE OUR OCEAN.

BY TAKING ACTION FOR OCEAN RECOVERY, WE CAN RESTORE LIFE TO UK SEAS FOR PEOPLE, CLIMATE AND NATURE WITH ABUNDANT MARINE WILDLIFE, HABITATS HEALTHY AND RECOVERING, AND HUMAN PRESSURES ON OUR OCEAN REDUCED, FROM FISHING TO POLLUTION.

JOIN THE FIGHT AT WWF.ORG.UK/OCEANHERO



