

A vibrant clownfish with orange and white stripes is swimming in a blue and purple coral reef. The background is a deep blue with purple coral structures.

National  
Oceanography  
Centre

# HELPING OUR PLANET FLOURISH

[NOC.AC.UK](http://NOC.AC.UK)



## **WE ARE THE NATIONAL OCEANOGRAPHY CENTRE (NOC), THE UK'S LARGEST OCEAN RESEARCH CHARITY**

**With some of the world's leading scientists and engineers our role is to combat challenges facing the ocean through scientific understanding and education, to help every living thing on our planet flourish.**

Everything we do at NOC is for public good; from direct protection of coastal communities, food security and livelihoods, to advancing carbon solutions that will limit the levels of climate change for generations to come.

The ocean is increasingly being relied upon to tackle some of the world's biggest challenges. Working directly with governments, NGOs and corporate partners across the world, we can turn research and technology into real world action and start seeing the benefits to ocean health and understanding now.

Our fate on this planet depends on our ocean and there is so much exciting power to harness in its depths.

**So here at NOC, we go deeper.**



## GOING DEEPER

Our planet is a blue planet. Most of its expanse is covered by the ocean. This vast space is the lifeblood of our world. Yet so much of our ocean is still to be discovered and its value is so often overlooked. That is why we go further to gain a deeper understanding of our ocean and coastlines.

### UNDERSTAND

We undertake internationally renowned science to understand some of the biggest threats to society including climate change, pollution and habitat loss, and their impact on society.

### EXPLORE

We use innovative technology and expertise to explore from the coasts to the deep ocean. Technology like Autonomous Underwater Vehicle Boaty McBoatface, which takes us to new depths.

### EDUCATE

We play a key role in nurturing the next generation of ocean scientists and educating people all over the world about ocean issues and solutions.

### THE UNITED NATIONS

The UN Decade of Ocean Science is providing a once in a lifetime opportunity for us to work together to generate the ocean science and public awareness needed to protect our ocean and our climate.

UN Sustainable Development Goals are the metric by which ESG (Environmental, Social and Governance) initiatives are measured. NOC's work contributes in part to them all, demonstrating the tangible impact we are having on the world's key issues. The ones we have the biggest impact on are:



## BLUE CARBON

NOC's blue carbon research aims to understand the ocean's role in reducing carbon in the atmosphere. The ocean already absorbs 25% of annual carbon emissions and there is potential for significantly more.

### CARBON IN THE OCEAN

The ocean offers enormous potential in the fight against climate change, but a thriving blue carbon sector requires a major scaling up of the UK science capacity for sampling, analysis and insight.

Our blue carbon work aims to grow our understanding of the rate at which ocean ecosystems capture and store carbon, the existing or potential emissions resulting from changes to them, and their contribution to supporting fisheries and the coastal protection they can provide.

### SUPPORTING NOC'S BLUE CARBON RESEARCH WILL:

- Improve our understanding of how much carbon the ocean stores and where
- Uncover how seagrass habitats, corals, and fisheries affect each other
- Help global decision makers to protect and restore carbon habitats
- Inform future marine Carbon Dioxide Removal (mCDR) approaches
- Impact policy and carbon finance
- Put the ocean at the centre of conversations about our climate and net-zero





## POLLUTION

NOC's plastic pollution research seeks to understand the true impact of plastic on our ocean ecosystems. We are finding more evidence of microplastics in important marine protected habitats and in the deepest trenches of the ocean.

### PLASTIC POLLUTION

Our plastics research aims to remove the knowledge gap around ocean plastics by understanding where they are, how they are circulating through the ocean circulation, and what impact they are having on life in the ocean around them.

Plastic is at the heart of our modern world. Reduction of its use and recycling helps, but almost all products and processes involve the use of plastics and so the responsibility to find where they end up rests with us all.

### SUPPORTING NOC'S PLASTICS RESEARCH WILL:

- Provide critical data on how much plastic there is in the ocean and where it is coming from
- Uncover how plastics move through ocean currents and change chemically as it decomposes
- Improve our understanding of the impact of microplastics on ocean life and habitats
- Inform ocean clean-up solutions
- Impact government and industry policy for plastic production and waste management

## BIODIVERSITY

NOC's biodiversity research provides vital insight into ocean habitats and their abundance of life, and how this is changing as our planet warms. With less than 25% of our seafloor mapped, much of our underwater world is still to be discovered and understood.

### LIFE IN THE OCEAN

Our ocean is the largest, most diverse ecosystem on our planet, but changes in ocean health are affecting delicate marine life and habitats.

Our biodiversity research aims to understand one of the most mysterious and crucial parts of our planet so that globally we can make informed decisions to conserve it.

### SUPPORTING NOC'S BIODIVERSITY RESEARCH WILL:

- Improve our understanding of life in the ocean
- Contribute to global efforts to map the seabed
- Provide vital data for ocean conservation
- Inform the creation and monitoring of Marine Protected Areas (MPAs)
- Identify new species in unexplored regions
- Impact policy for deep-sea activities





## EDUCATING

NOC plays an important role in education and training future generations of scientists and informed citizens. If we want to see our ocean and our planet thrive, we must make sure our children understand our ocean and are empowered to shape its future.

### INSPIRING THE NEXT GENERATION OF OCEAN GUARDIANS

The ocean is the most important ecosystem on Earth but is all too often considered to be 'out of sight and out of mind'.

Our education work brings STEAM learning to life for children and young adults, connecting them to the wonders of the ocean and the exciting careers that it provides. As well as providing leading training and development for our community of postgraduates and early career researchers.

### SUPPORTING NOC'S EDUCATION PROJECTS WILL:

- Inspire future generations of ocean scientists and explorers
- Bring STEAM learning to life with expert scientists and engineers from a range of disciplines
- Create vital resources for national and international communities
- Provide leading support for early career researchers and postgraduates
- Safeguard our oceans future

## INVESTING IN OUR OCEAN

As an independent charity, research integrity is at the heart of NOC. With philanthropic funding we can focus on the biggest threats to our ocean and humanity and work in partnership with organisations to drive rapid innovation and positive change.

### YOUR SUPPORT

Philanthropy at NOC enables projects at the forefront of emerging and exciting ocean and climate science. We work with businesses and philanthropists, who are like-minded visionaries, to advance our global understanding of the ocean.

Through your support you are demonstrating your commitment to invest in a better world and make tangible strides towards achieving your ESG aspirations.

### BY SUPPORTING NOC AND OUR PROJECTS YOU WILL:

- Be investing in UK capability with global impact
- Make a huge impact in the fight against climate change
- Provide a legacy that creates a better, more sustainable future for everyone and everything





**FOR FURTHER INFORMATION ON SPECIFIC PROJECTS  
AND PARTNERSHIP OPPORTUNITIES, CONTACT THE  
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