FOR IMMEDIATE RELEASE

KFF and CCRC Receive a Grant for Kelp Carbon Sequestration Modelling

Amsterdam, November 10th, 2021 – The **Kelp Forest Foundation** and the **Centre of Climate Repair at the University of Cambridge** are pleased to announce they have been awarded a USD290,000 grant from the Special Project Funding of the **Gordon and Betty Moore Foundation**, to create an open-source model to assess the carbon sequestration potential of cultivated kelp. The model development will be led by John Taylor, Professor of Oceanography in the Department of Applied Mathematics and Theoretical Physics at the University of Cambridge University.

Kelp is a fast-growing seaweed with the potential to enhance marine carbon uptake and storage. However, the interactions between cultivated kelp and the natural ecosystem have yet to be fully studied. Understanding these interactions is essential to assessing the use of cultivated kelp as a strategy to mitigate climate hazards with significant economic, environmental, poverty reduction, and food security benefits. Biogeochemical cycles in particular are complicated and difficult to fully constrain with measurements alone, and the new model will be used to fill in missing data and unmeasurable quantities. The model will help to quantify the rate of carbon storage and sequestration by kelp and the interactions with the local environment.

Kelp can generate positive ecological benefits to surrounding ecosystems in the form of water filtration, nitrogen removal and habitat provision. By removing CO2 from the surface ocean, kelp can also counteract ocean acidification. Kelp farms have the potential to enhance ocean CO2 uptake on a climate relevant scale while providing opportunities for kelp value-chains, coastal employment and upskilling. Advancing knowledge of kelp farming and its impacts will help to assess its potential as a climate repair strategy.

John Taylor commented: “We are excited to begin this collaboration between the Kelp Forest Foundation and the Gordon and Betty Moore Foundation to create a new community tool for this rapidly developing field and to address urgent scientific questions.”

Samantha Deane, Managing Director of KFF, added that: “The model is a key piece of our research programme which aims to accelerate the awareness and knowledge about the uses and applications of kelp forests as powerful nature-based solutions to a range of environmental problems including excess GHG emissions.”

"Fostering research collaborations between universities and organisations making change happen in the field is so important. The Centre for Climate Repair at Cambridge and the Department of Applied Maths are delighted to be working with Kelp Forest Foundation to further our understanding of the potential of kelp to regenerate oceans, support communities, increase biomass and help as we seek to Repair our Climate" said Dr Shaun Fitzgerald, Director, Centre for Climate Repair at Cambridge.

– ENDS –

About Gordon and Betty Moore Foundation

The **Gordon and Betty Moore Foundation** fosters path-breaking scientific discovery, environmental conservation, patient care improvements and preservation of the special character of the Bay Area.

Visit *Moore.org* or follow @MooreFound to learn more.

About the Kelp Forest Foundation (KFF)

KFF is a non-profit charity founded in 2021, with headquarters in The Netherlands. It's vision is to harness the power of kelp to help restore the health of the planet. KFF aims to raise the awareness of the economic and ecological importance of kelp forests, drive research, build knowledge and strengthen the science around wild forest restoration and cultivated kelp afforestation.

The research and model will be open access and made publicly available.

Visit *KelpForestFoundation.org* to learn more.

About the Centre for Climate Repair at Cambridge (CCRC)

CCRC is an organisation based at the University of Cambridge, providing independent research and analysis of potential solutions to protect the planet from the devastating effects of climate change. It strives to promote the rejuvenation of climate moderating systems while balancing human development concerns.

Visit *Climaterepair.eng.cam.ac.uk* to learn more.