

Blue Carbon: Beyond the Inventory

Royal Society of Edinburgh and online

Thursday 11th November

09:00 REGISTRATION – Teas & Coffees

10:00 Session #1

Opening Remarks – **Professor Bill Austin** (Chair Scottish Blue Carbon Forum, for Scottish Government)

Welcome on behalf of the RSE – **Professor Marcel Jaspars** (VP-International, RSE)

Welcome on behalf of the Scottish Government – **Mairi Gougeon MSP** (Cabinet Secretary for Rural Affairs and Islands, Scottish Government)

Scotland's Natural Environment - **Professor Andrew Millar** (Chief Scientific Advisor on Environment, Natural Resources and Agriculture, for Scottish Government)

Message of Support from the IOC/UNESCO – **Dr Vladimir Ryabinin** (Executive Secretary, Intergovernmental Oceanographic Commission)

Reflections from COP26 – **Dr Kirsten Isensee** (Programme Specialist – Ocean Carbon Sources and Sinks, IOC/UNESCO)

11:00 2 minutes silence – the eleventh hour, the eleventh day of the eleventh month.

11:05 Session #2

Blue Carbon Initiative: transforming science into effective policy and management

Emily Pidgeon, Kirsten Isensee, Dorothee Herr

Blue Carbon in NDCs – Case Studies in Ambition

Stacy Baez, Tom Hickey, Simon Reddy

Conservation and restoration of blue carbon stocks

Catherine E. Lovelock (Keynote)

12:00 Lunch & Posters

13:00 Session #3

Tiger sharks, scientists, and entrepreneurs partner to guide the discovery of world's largest seagrass meadow in The Bahamas

Wells Howe, S. David Harris, Carlos M. Duarte, Austin J. Gallagher

Estimating the Size of the Global Seafloor Organic Carbon Sink – Uncertainties and Data Limitations

Markus Diesing

Scotland's forgotten carbon: exploring the mechanisms that drive carbon burial and storage in mid-latitude fjords

Craig Smeaton, Cui Xingxiang, Hangdong Yang, Negar Haghypour, Timothy Eglinton, Thomas Bianchi, William Austin

Interactive effects of climate change and land use change on carbon burial at millennial timescales

Kamenos NA, J Mao, RAR McGill, J Newton, P Gulliver, HL Burdett

How do we find macroalgal particulate organic carbon sinks and how do we protect them?

Ana M Queirós, Michel Bedington, Andrew Bell, James Clark, Christine Pascoe, Daniel Smale, Paul J Somerfield, Karen Tait, Ricardo Torres, Rob Wilson

Blue Carbon – An Irish Perspective

Grace M Cott, Andrea Fuchs, Lisa Jessen, Shannon Burke, Pedro Beca-Carretero, Dagmar B Stengel

15:00 Tea & Posters

15:30 Session #4

Blue Methane: Challenges and Opportunities Posed by Methane Emissions for Blue Carbon Accounting

J. Patrick Megonigal, James Holmquist, Genevieve Noyce, Kevin Kroeger (Keynote)

Estimating Aboveground Biomass and Biomass Change of Mangrove Forests in the Niger Delta

Nwobi, C.J., Williams, M., Mitchard, E. T. M.

Potential Contribution of Mangroves to Indonesia's Natural Climate Solution

J. Boone Kauffman, Virni Budi Arifanti, Subarno, Muhammad Ilman, Nisa Novita

Belize Blue Carbon: Establishing a national carbon stock estimate for mangrove forests

H.K. Morrissette, S. Baez, L. Beers, N. Bood, S. Crooks, J. Lefcheck, N. Martinez, K. Novelo, S.W.J. Canty

17:00 Glenmorangie Partnership Lecture

The 'DEEP' triple helix: Partnership working in environmental restoration and its role in blue carbon storage and management

William G. Sanderson

18:30 Evening Reception at the Grand Gallery, National Museum of Scotland (sponsored by The Glenmorangie Company; smart-casual; ends at 20:30) – welcome by ***Annabel Turpie*** (Director of Marine Scotland), opening remarks by ***Thomas Moradpour*** (President and CEO of The Glenmorangie Company), and address by ***Mairi Gougeon MSP*** (Cabinet Secretary for Rural Affairs and Islands, Scottish Government).

16:00 Projection onto the RSE building (ends 24:00)

WE ARE OCEAN | INTO THE OCEANIC ***Anne-Marie Melster***, co-founder/director of ARTPORT_making waves, joins with the environmental artist ***Elizabeth Ogilvie*** and artist/filmmaker ***Robert Page*** to showcase an impactful art-science film project.

Friday 12th November

09:00 REGISTRATION – Teas & Coffees

10:00 Session #5

Academia meets policy: how do parliaments use blue carbon academic research to support policymaking?

Roxana T Shafiee, Damon Davies, Anna Brand, Alexa Morrison

The feasibility of establishing seabed sediment blue carbon MPAs: a UK case study

Graham Epstein, Callum M. Roberts

Climate mitigation potential of the European shelf seabed: significance, risks, recoverability, value and management

Ruth Parker, Lisa Benson, John Aldridge, Natalie Hicks, Dorte Krause-Jensen, Michael Burrows, Carol Robinson, Tiziana Luisetti, William Austin, Johan van der Molen, Jordan Gacutan, Rui Vieira

11:00 Tea & Posters

11:30 Session #6

Towards shelf seabed carbon management in England

Parker, R, Aldridge, J, Bullimore, R, Mynott, F, Proctor, W, Lamb. P, Chaniotis, P, Cook, D

Guiding the restoration of our estuaries and coasts

Benjamin C Green, Eve Leegwater, Rachel Hudson, Will Manning, Joe Kenworthy, Mike Best, Colin Scott, Celine Gamble, Azra Glover, Joanne Preston, Alison Debney, Roger Proudfoot

Coastal and Marine Blue Carbon in a U.S. MPA: An Assessment and Guidance for Managers

Hutto, Sara, Hohman, Rietta, Tezak, Sage

12:30 Discussion

13:00 Lunch and Posters

14:00 Session #7

Operationalising marketable blue carbon

Peter I. Macreadie, Alistar I. Robertson, Bernadette Spinks, Matthew P. Adams, Jennifer M. Atchison, Justine Bell-James, Brett Bryan, Long Chu, Karen Filbee-Dexter, Lauren Drake, Carlos M. Duarte, Daniel A. Friess, Felipe Gonzalez, Quentin Grafton, Kate J. Helmstedt, Melanie Kaebnick, Jeffrey Kelleway, Gary A. Kendrick, Hilary Kennedy, Catherine E. Lovelock, J. Patrick Megonigal, Damien T. Maher, Emily Pidgeon, Abbie A. Rogers, Rob Sturgiss, Stacey M. Trevathan-Tackett, Melissa Wartman, Kerrie A. Wilson, Kerrylee Rogers (Keynote)

The interpretation of justice in blue carbon projects

Mark Huxham, Robyn Shilland, Anne Kairu

Requirements for Connecting Coastal Blue Carbon Projects to the Carbon Market and Evaluating Inclusion of Seascape Carbon

Stephen Crooks, Iginio Emmer, Moritz von Unger, Lisa Beers, Leah Glass

A case for a UK Saltmarsh Carbon Code: Evidence, Intervention, and Investment

A Burden, M Reed, A Hipkiss, T McGrath, M Skov, W Austin, R Fitton, C Mahon, C Evans, A Garbutt, H Rudman, K Born, N Pontee, R Field

15:30 Discussion

Closing remarks on behalf of the Scottish Government – ***Mairi McAllan MSP*** (Minister for Environment and Land Reform, Scottish Government)

16:00 Posters & Drinks Reception

17:00 Close of Meeting