



# CORPORATES

## The Cooperative Participatory Evaluation of Renewable Technologies on Ecosystem Services.

CORPORATES was an interdisciplinary knowledge exchange project funded by the UK Natural Environment Research Council (NERC) under the Biodiversity and Ecosystem Service Sustainability (BESS) programme. The project sought to develop a process for knowledge exchange around marine ecosystem services within the context of marine spatial planning decisions; partners included Aberdeen University (project lead) (Biological Sciences, Geography and Law), the Scottish Association for Marine Studies, Marine Scotland Science and the James Hutton Institute. The project centred on a real-life case in the form of proposed off-shore wind farms and Marine Protected Areas in the Firth of Forth and the Firth of Tay, Scotland, an area where varied interests coincide in space and time. While stakeholder consultation is already integral to existing procedures, the project investigated the usefulness of embedding a participatory ecosystem services approach into the decision-making process. Two consecutive workshops, with the same stakeholders (representing marine renewable energy, fisheries, tourism, recreationalists, local government, conservation non-governmental organisations) used different participatory methods (e.g. mapping of activities and benefits associated with different sectors, joint construction of a conceptual model of the social-ecological system and deliberation of future policy impacts on different sectors) to generate a shared understanding of the interlinkages among different aspects of the marine ecosystem and the activities and benefits humans derive from it. Each workshop also incorporated interludes of knowledge exchange by experts on ecological processes underpinning current knowledge of ecological impacts within ecosystem services and the interconnectedness of multiple laws and policies. Stakeholder feedback highlighted the usefulness for cooperative learning within the context of an ecosystem services framework and for enabling joint sector deliberation in marine spatial planning procedures.

**The CORPORATES REPORT**, which is both a manual and an evaluation is published in the Scottish Marine and Freshwater Science Series: <http://www.gov.scot/Publications/2016/02/4961> ISBN: 9781785449758 Scott, B.E., Irvine, K., Byg, A., Gubbins, M., Kafas, A., Kenter, J., MacDonald, A., O'Hara Murray, R., Potts, T., Slater, AM., Tweddle, J., Wright, K., Davies, I. (2016). The Cooperative Participatory Evaluation of Renewable Technologies on Ecosystem Services (CORPORATES). Scottish Marine and Freshwater Science Vol 7 No 1

### CORPORATES Road Tested with Marine Regional Planners & Plus:

The CORPORATES team have had a 'road test' of the approach by providing a workshop sponsored by MASTS and MarCRF run Feb 16, 2016. This workshop was run as both a training opportunity for a range of 22 marine planners on how to provide this new approach, as well as a chance for constructive criticism of the approach.

#### Attendees

**Government and local government:** MS, MMO, DEFRA, Welsh Gov, English Nature, SNH, Shetland Marine Spatial Planning,

**Local Partnerships and Forum:** Solway Firth Partnership, East Grampian Coastal Partnership, Tay Estuary Forum, Clyde Forum, Forth Estuary Forum

and

#### Sponsors:

**Local Councils:** Orkney Council, CNE-Siar Council, Argyll & Bute Council, Highland Council

**Academics:** SAMS, Newcastle, Aberdeen

**NGOs:** LINK, WWF



Marine Alliance for Science and Technology for Scotland



**Up Next:** JNCC has now also asked the CORPORATES team to present an interactive session with their staff in the spring of 2016 (Date now set: April 12, 2016)

## **CORPORATES Dissemination:**

### **Conference papers:**

Tweddle J.F., A. Byg, I. Davies, M. Gubbins, K. Irvine, A. Kafas, J. Kenter, A. MacDonald, R. O'Hara Murray, T. Potts, A.M. Slater, K. Wright, B.E. Scott (2015). Bringing the ecosystem services concept into marine management decisions. ICES CM 2015/O:15

\*See BLOG <http://blogs.scotland.gov.uk/coastal-monitoring/2015/10/13/scottish-findings-p>

Tweddle J.F., R. O'Hara Murray, B. Scott, M. Gubbins (2014). Evaluating ecosystem services: Starting at the bottom of the food chain? ICES CM 2014/3548 N:01

### **Use in Workshops:**

Slater, Anne-Michelle used CORPORATES as part of her presentation at the Commonwealth Law Conference in April 2015 in Glasgow

Scott, Beth presented CORPORATES at the North Sea Marine Planning Exchange workshop on 2nd July 2015 <https://marineplanningexchange.com>

Scott, Beth presented CORPORATES at the Scottish Universities Insight Institute - Flourishing Communities and Productive Sea's on 10th December 2015

<http://www.scottishinsight.ac.uk/Programmes/Programmes20152016/FlourishingCommunitiesandProductiveSeas.aspx>

Scott, Beth presented interactive sessions of CORPORATES in SNH – Dealing with Uncertainty in the Marine Environment – Assessing impacts of renewables developments 12-Feb-2016

<http://www.snh.gov.uk/policy-and-guidance/sharing-good-practice/presentations/document>

### **Conference Presentations (International and National):**

Tweddle J.F., A. Byg, I. Davies, M. Gubbins, K. Irvine, A. Kafas, J. Kenter, A. MacDonald, R. O'Hara Murray, T. Potts, A.M. Slater, K. Wright, B.E. Scott (2015). Bringing the ecosystem services concept into marine management decisions. MASTS Annual Science Meeting, Glasgow, UK. Oral presentation.

Tweddle J.F., A. Byg, I. Davies, M. Gubbins, K. Irvine, A. Kafas, J. Kenter, A. MacDonald, R. O'Hara Murray, T. Potts, A.M. Slater, K. Wright, B.E. Scott (2015). Bringing the ecosystem services concept into marine management decisions. ICES Annual Science Conference, Copenhagen, Denmark. Oral Presentation.

Tweddle J.F., R. O'Hara Murray, M. Gubbins, B.E. Scott (2014). Evaluating ecosystem services: Starting at the bottom of the food-chain? ICES Annual Science Conference, La Coruna, Spain. Oral presentation.

Tweddle J.F., R. O'Hara Murray, M. Gubbins, B.E. Scott (2014). The future of managing our oceans: Starting at the bottom of the food-chain? Challenger Conference for Marine Science, Plymouth, UK. Oral Pres.

Tweddle J.F., R. O'Hara Murray, M. Gubbins, B.E. Scott (2014). The future of managing our oceans: Starting at the bottom of the food-chain? MASTS Annual Science Meeting, Edinburgh, UK. Oral presentation.

### **UPCOMING International Conferences in 2016 that CORPORATES will have oral presentations:**

**Ocean Sciences Meeting 2016 New Orleans, USA** <http://osm.agu.org/2016/>

Tweddle J.F., A. Byg, I. Davies, M. Gubbins, K. Irvine, A. Kafas, J. Kenter, A. MacDonald, R. O'Hara Murray, T. Potts, A.M. Slater, K. Wright, B.E. Scott (2015). Bringing the ecosystem services concept into marine management decisions: an interdisciplinary approach.

**ICES MSEAS 2016 France, June 2016:** Understanding marine socio-ecological systems: including the human dimension in Integrated Ecosystem Assessments. Two talks accepted <http://www.ices.dk/news-and-events/symposia/MSEAS/Pages/MSEAS.aspx>

Scott, B.E., Irvine, K.N., Byg, A., Gubbins, M., Kafas, A., Kenter, J., MacDonald, A., O'Hara Murray, R., Potts, T., Slater, A.M., Tweddle, J., Wright, K., Davies, I. Does the use of ecosystem services concepts support local stakeholder participation and improve the marine spatial planning process?"

Slater, A.M., MacDonald, A., Davies, I. Irvine, KN., Byg, A., Gubbins, M., Kafas, A., Kenter, J., O'Hara Murray, R., Potts, T., Tweddle, J., Wright, K., Scott, BE. The role of the legal and policy framework in facilitating an effective balancing of ecosystem services in decision making in the marine environment in Scotland