

ECO Wind

BOWIE: Towards enabling sustainable expansion of offshore wind while protecting marine benthic biodiversity and functioning

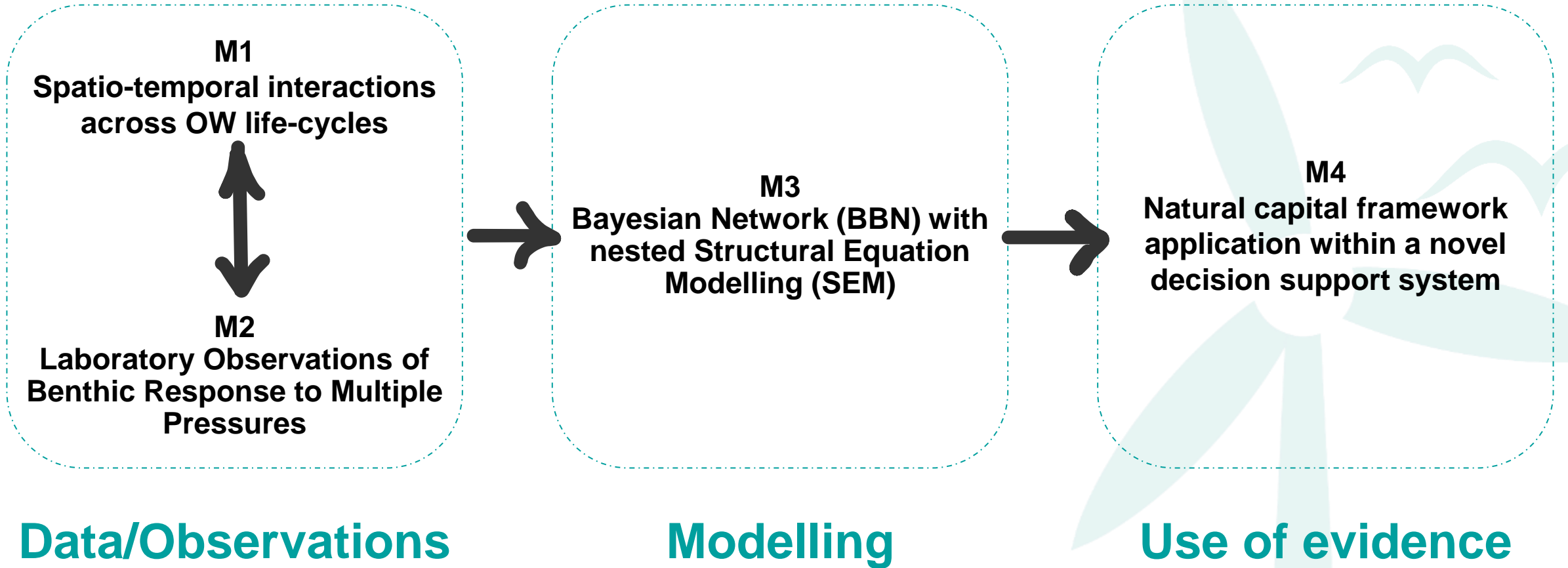
Gaetano Grilli

Norwich Business School – G.Grilli@uea.ac.uk

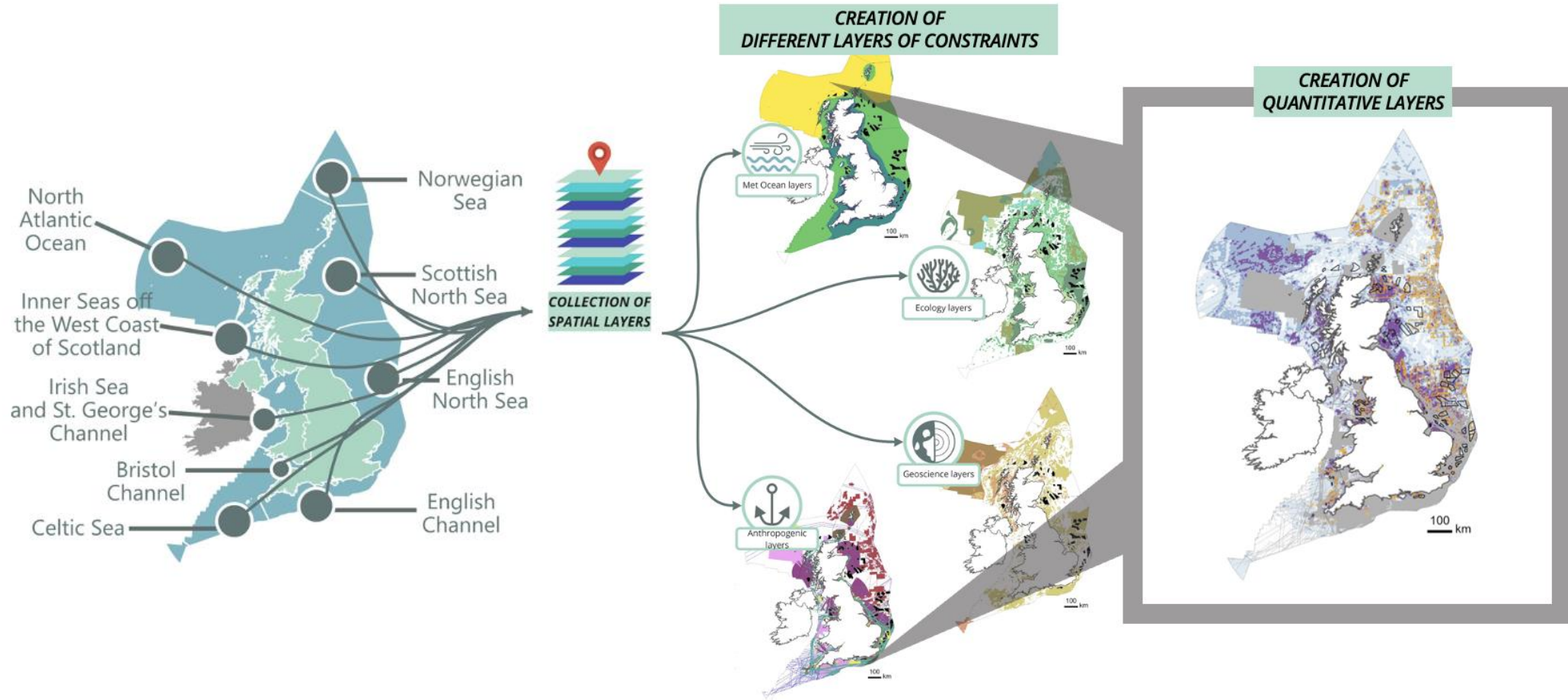
Centre for the Social and Economic Research on the Global Environment (CSERGE)

Project PI: Martin Solan and Krysia Mazik
m.solan@soton.ac.uk / k.mazik@hull.ac.uk





Module 1: Spatio-temporal interactions across OW life-cycles

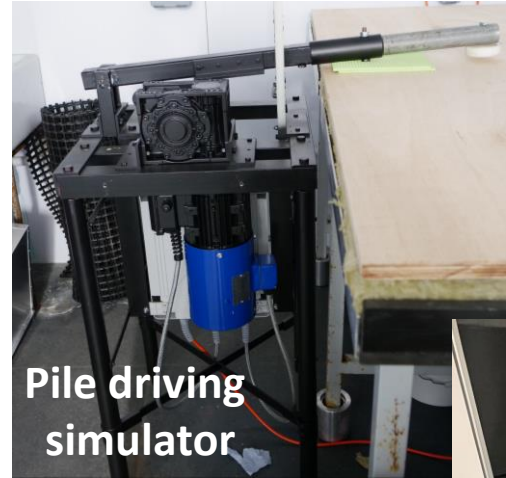


A public dashboard is already available and will be further expanded – [LINK](#)

Module 2: Laboratory Observations of Benthic Response to Multiple Pressures



**Present and future environments
(warming, acidification, hypoxia)
(fishing disturbance)**



**Pile driving
simulator**



**Vibration and physical
disturbance**



**Cables
(heat dissipation)**

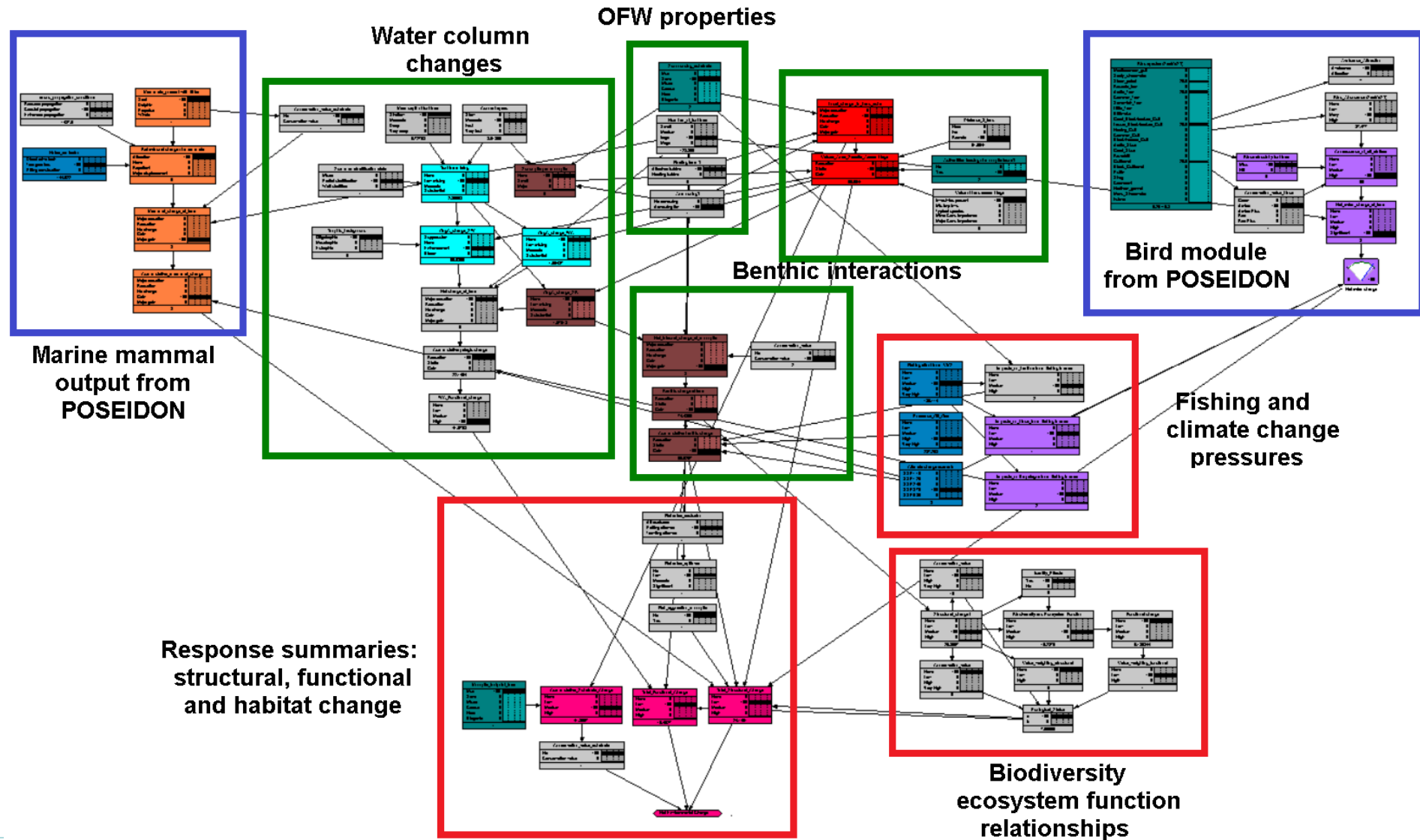


**Impulsive and
continuous sound**

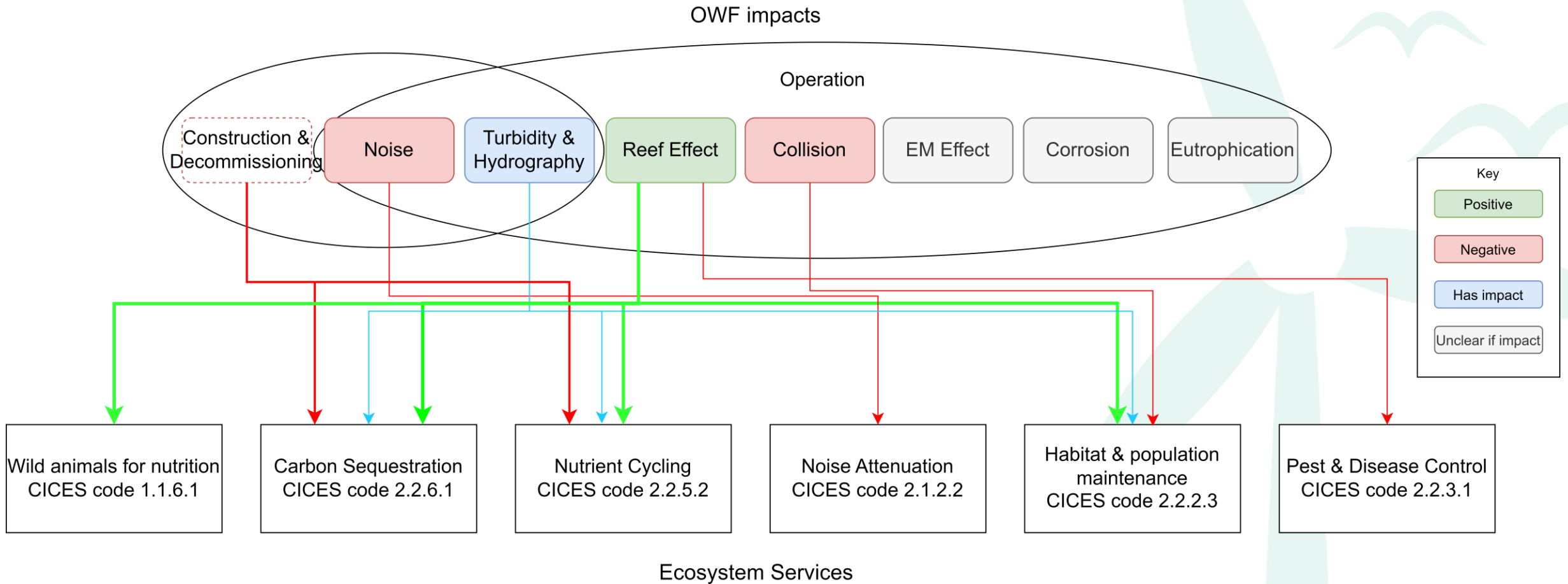


**Cable and cable protection
(electromagnetism and thermal)**

Module 3: Bayesian Network (BBN) with nested Structural Equation Modelling (SEM)

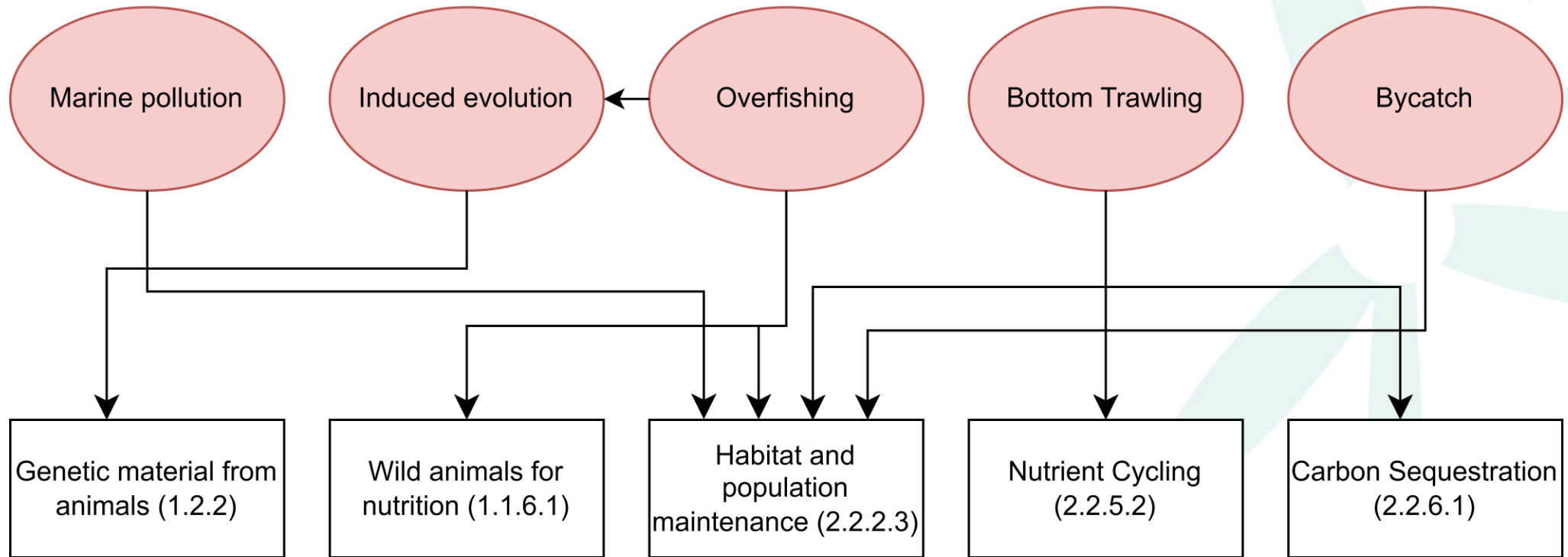


Module 4: Natural capital framework application within a novel decision support system



Module 4: Natural capital framework application within a novel decision support system

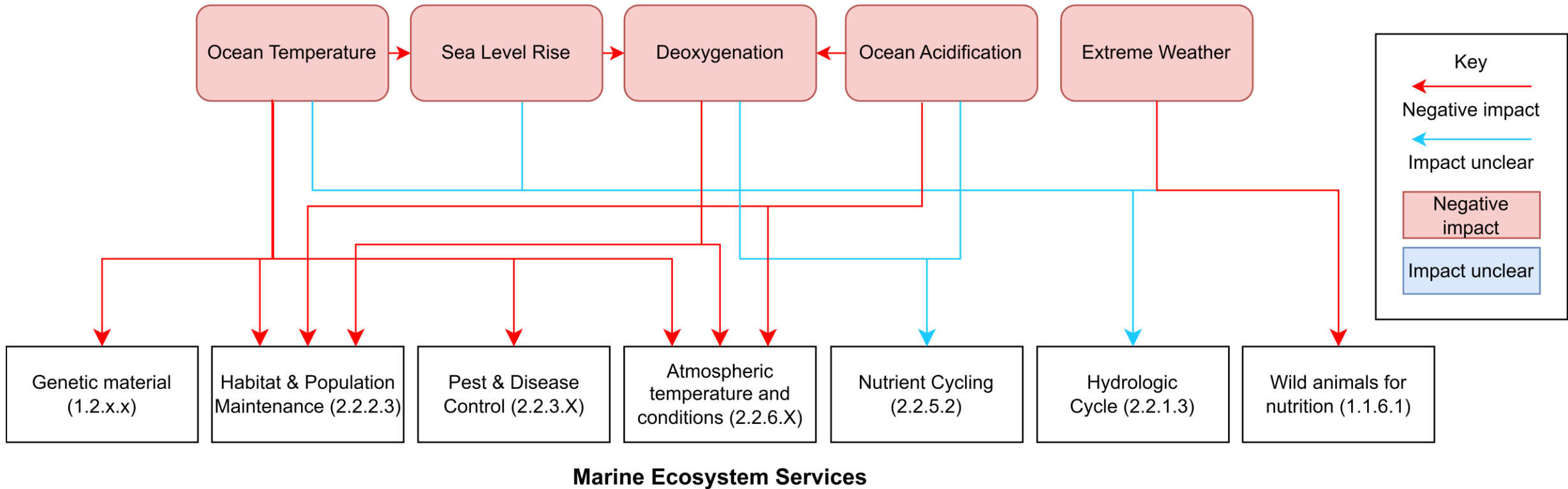
Impacts from fishing



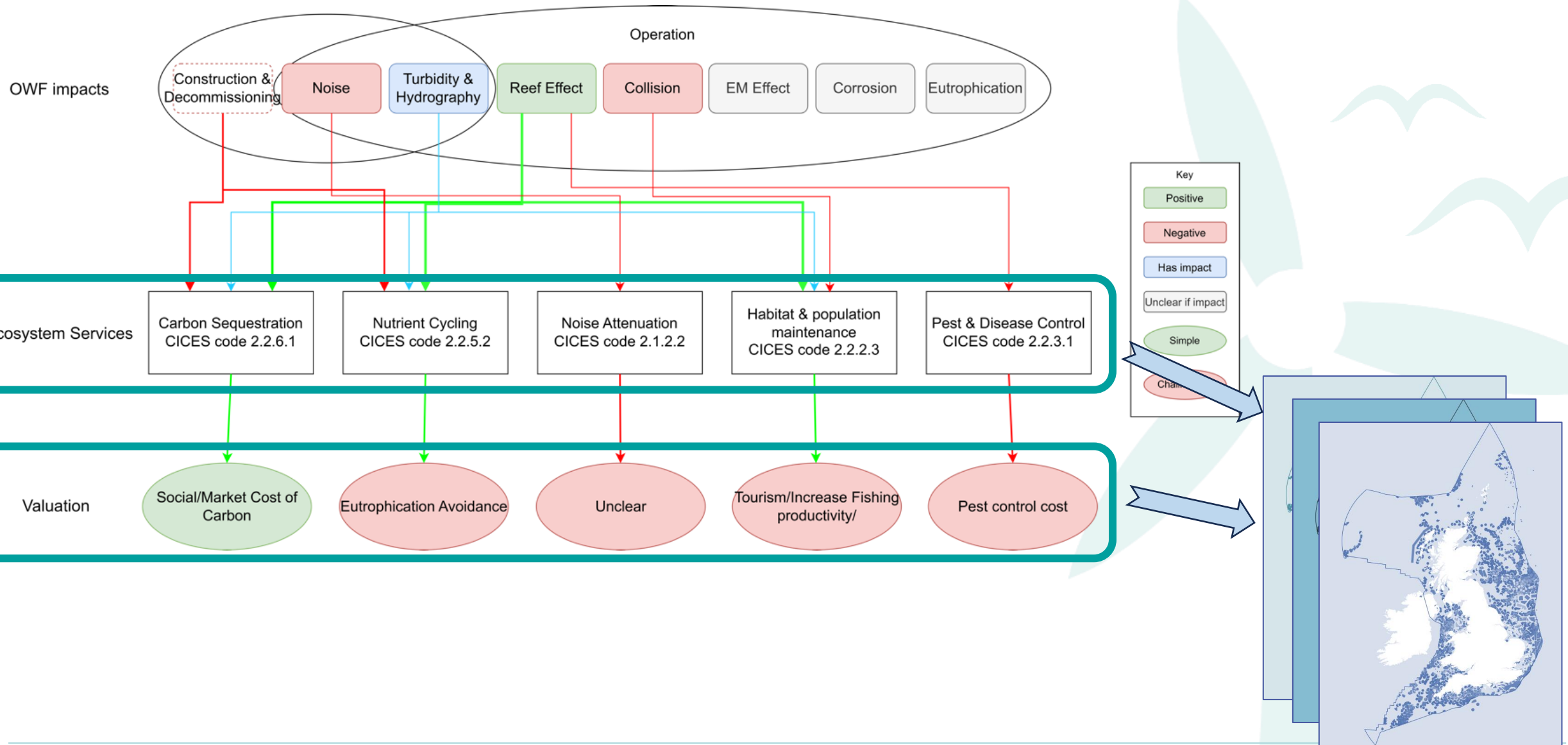
Ecosystem service

Module 4: Natural capital framework application within a novel decision support system

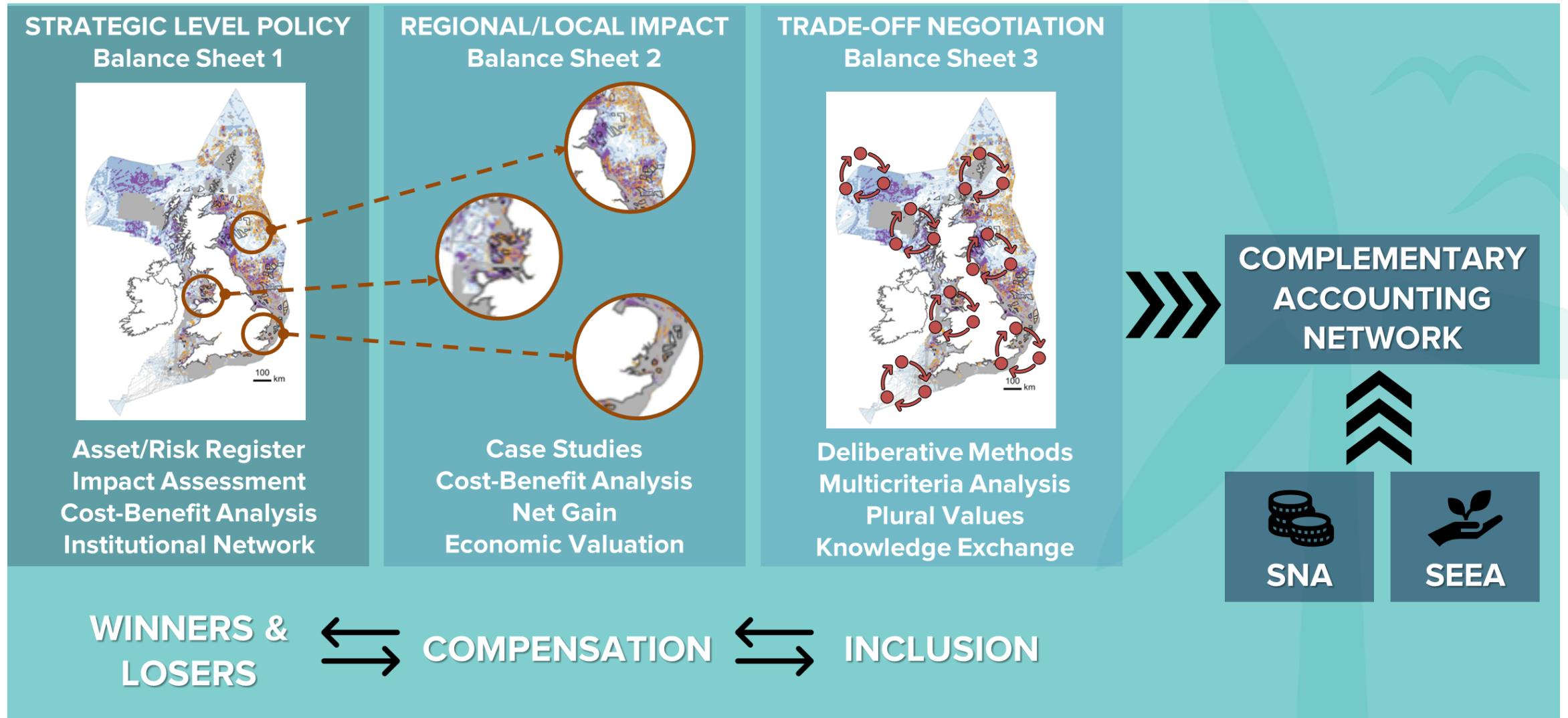
Climate Change Impacts



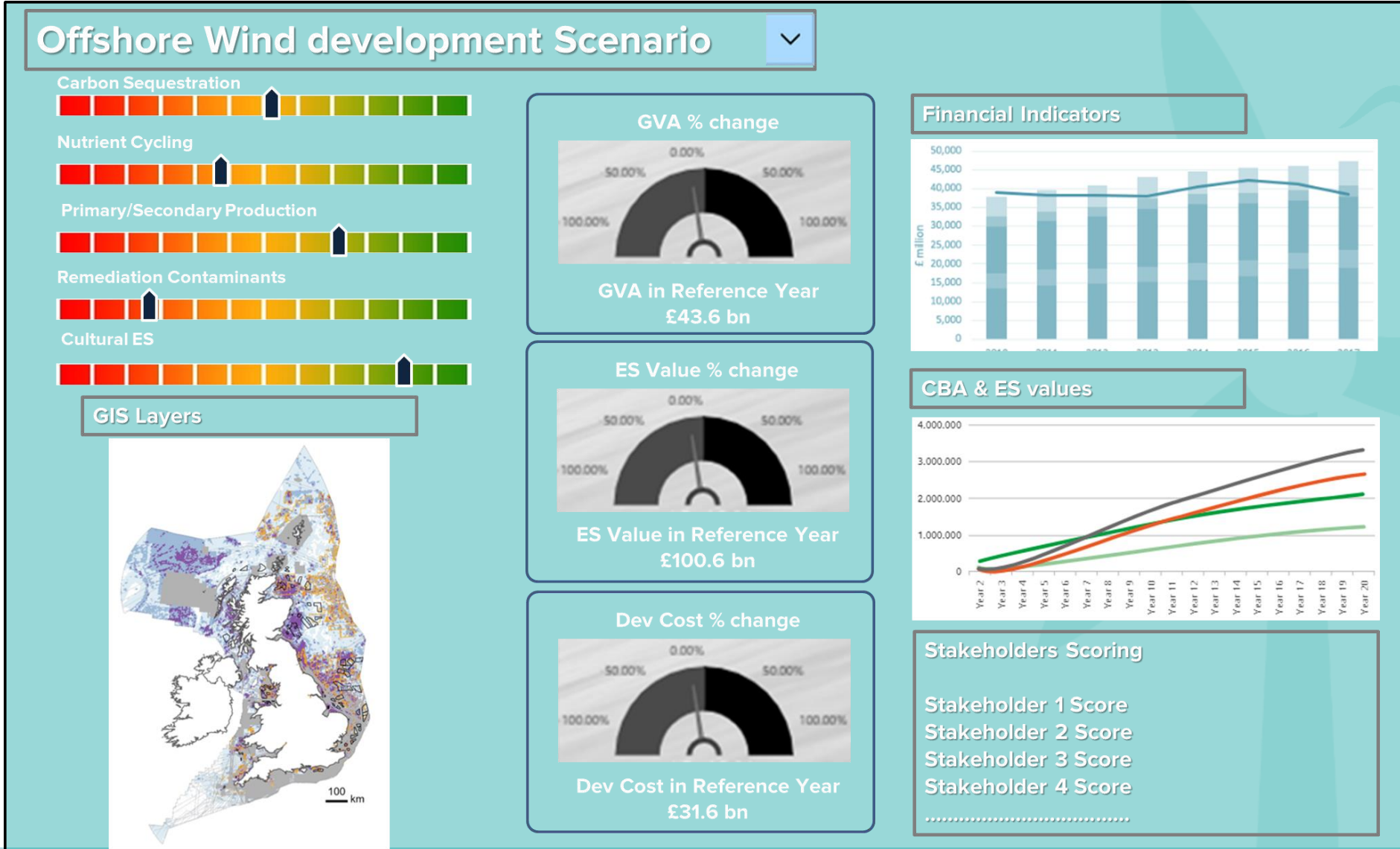
Module 4: Natural capital framework application within a novel decision support system



Module 4: Natural capital framework application within a novel decision support system



Module 4: Natural capital framework application within a novel decision support system



Thank you!

G.Grilli@uea.ac.uk

www.cserge.uea.ac.uk

www.ecowind.uk

