

CROSS-CUTTING SYSTEMS
TASK GROUP

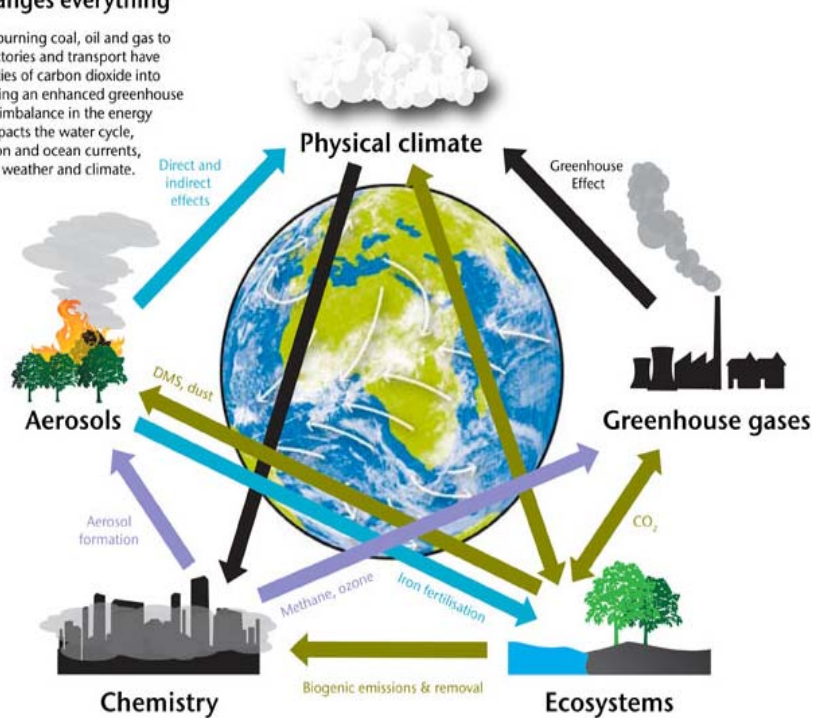


Climate change as a...system

The Earth System

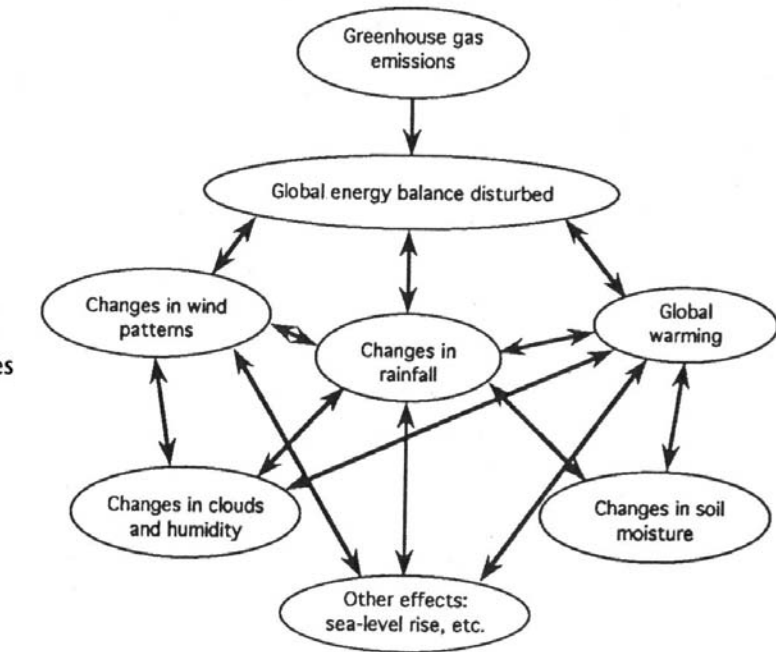
One thing changes everything

Human activities like burning coal, oil and gas to power our homes, factories and transport have released huge quantities of carbon dioxide into the atmosphere, causing an enhanced greenhouse effect. This causes an imbalance in the energy cycle that, in turn, impacts the water cycle, atmospheric circulation and ocean currents, leading to changes in weather and climate.

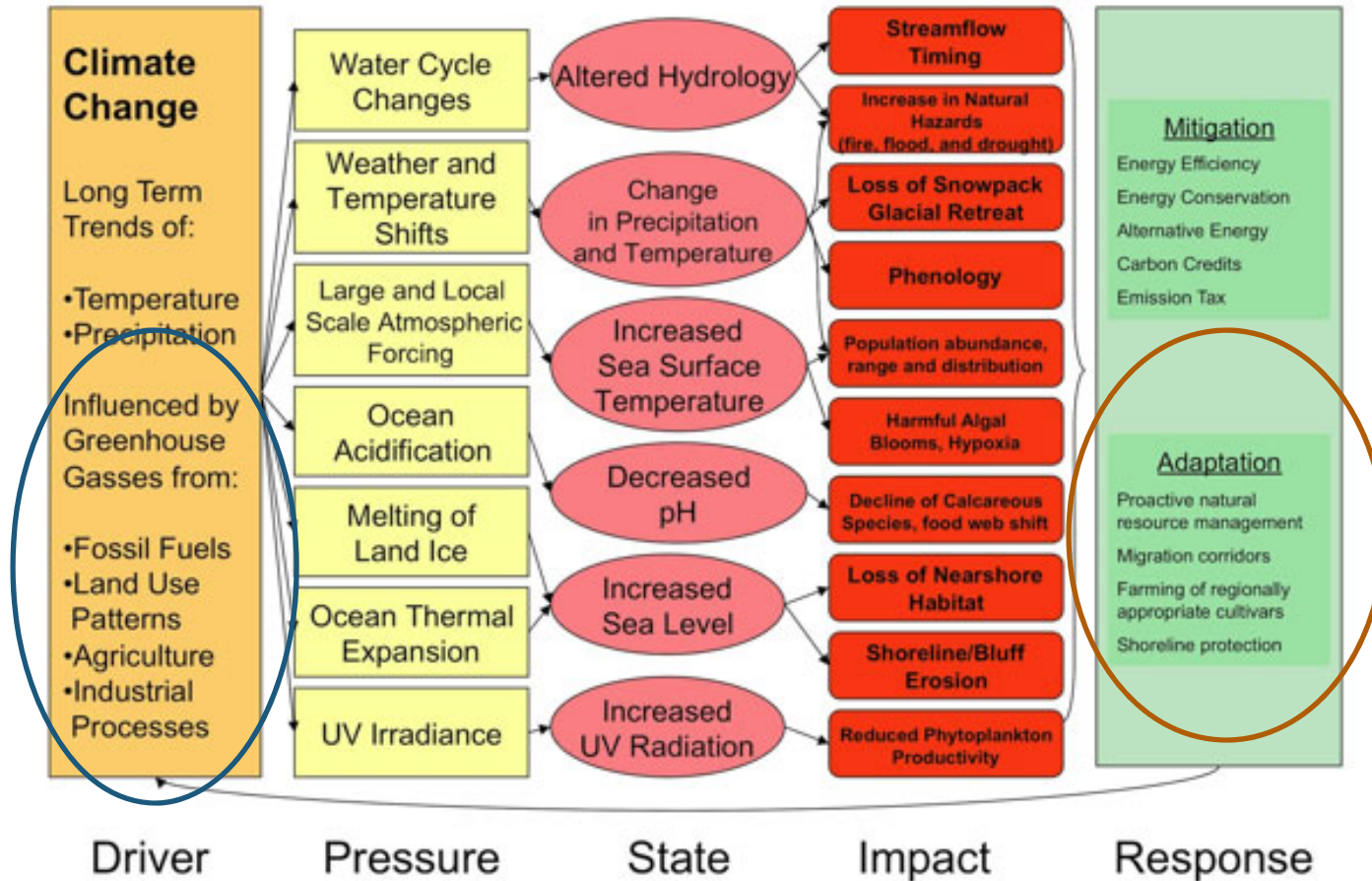


Schematic figure of HadGEM2-ES and the earth system interactions it represents

A more realistic view



Climate Change Model



DO NO HARM – PEOPLES, COMMUNITIES, THE ENVIRONMENT

LULC –
public/private,
Nature-based
solutions

Climate-resilient
zones, human
and species
movements,
access & equity

**Future projections of changes
in the statistics of: HDDs,
CDDs, heat waves, seasonal
precip metrics, air quality,
growing season, thresholds
(e.g. days >87°F), all natural
hazards**

Governance &
planning – scale,
barriers to climate
resilience

Residential
energy use,
changes in
amps,
stability of
the grid

Identify existing data gaps, sources of uncertainty, potential system changes
in the future

Equity-based data/information visualizations