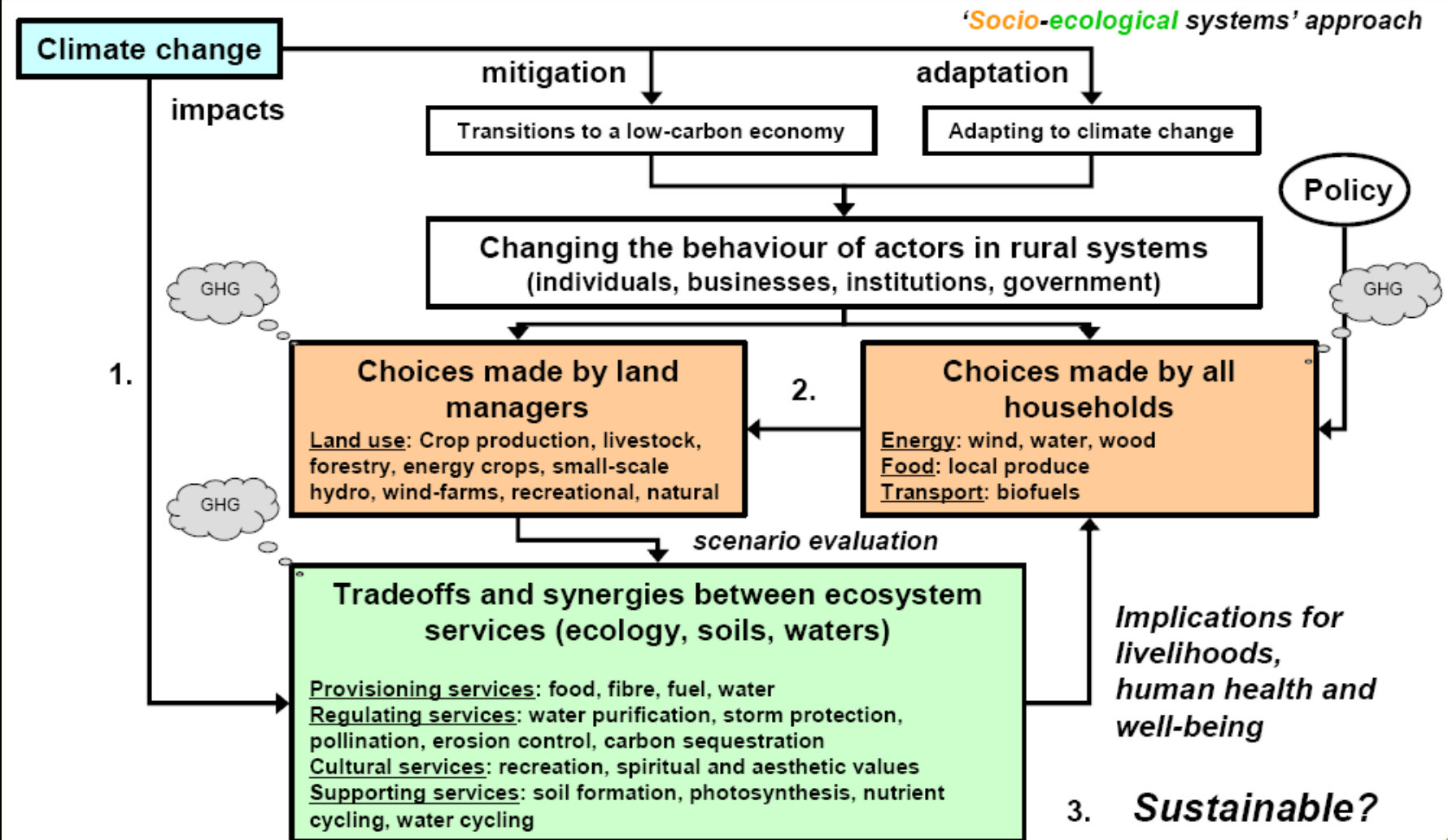


Introduction to Climate Change

- Changes in volume, intensity and seasonality of precipitation
- Changes in temperature and evapotranspiration
- Changes in land use
 - Changes in hydrology
 - Flooding, droughts, groundwater recharge
 - Changes in water quality
 - Dilution, erosion, leaching
 - Changes in ecology
 - Thermal, habitat, quality, morphological

Climate Change Systems Approach



Climate Change Catchment Management Studies

- Relationships between stream thermal regimes and ecology
- Historical evidence for changes in runoff and water quality
- Space for time assessment of surface water recovery from nutrient enrichment
- National assessment of hydrological impacts and implications for nitrate risk
- Integration of hydrology, land capability, land use and water quality

Climate Change Water balance and N leaching risk

<i>Mean annual effects</i>		<i>Seasonal effects</i>	
Precipitation	Decreases	Precipitation	Drier spring / summer
Runoff	Decreases more	Runoff	Reduced in spring / summer
Potential leaching	Variable	Potential leaching	Reduced in autumn
Pollution vulnerability	Little change	Pollution vulnerability	Seasonal shift to peak later

