

# Environmental assessment and climate change

UNECE Espoo Convention

Meeting of the Parties: Future directions

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# Key points

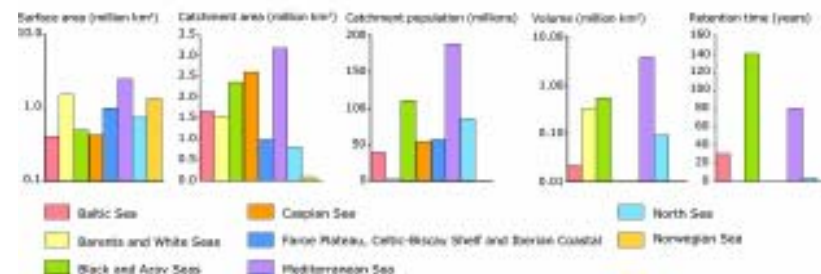
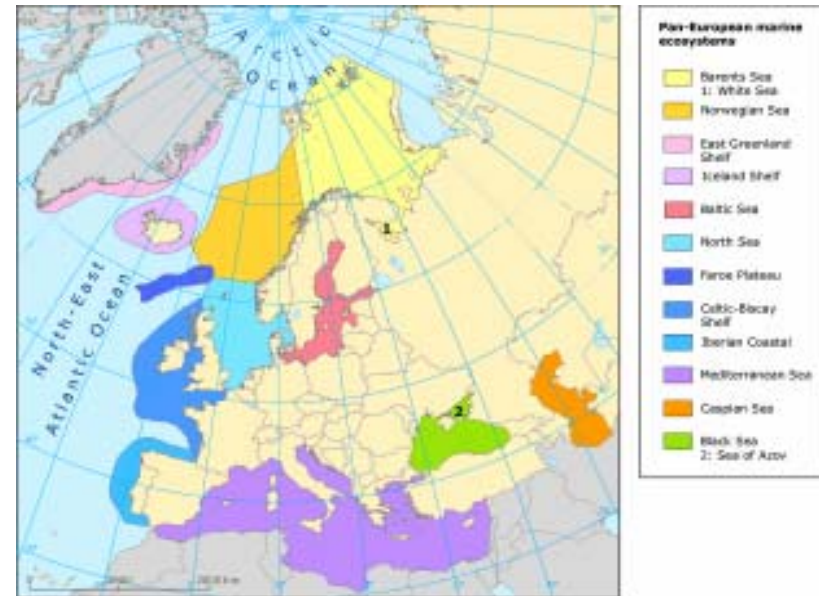
- Climate change is happening, with significant impacts for societies, economies and environment
- EA should be anticipatory & preventive
- EA has neglected climate change: why?
- Possible reasons
- Recommendations to resolve this

# Climate change

- Climate change is happening and will increase (IPCC 4<sup>th</sup> Assessment; EEA; Stern Review)
- Mitigation (reduction) and adaptation are essential
- Mitigation and adaptation responses need coordinating, and will themselves have impacts
- Therefore important role for EA
- Implications for trans-boundary assessment

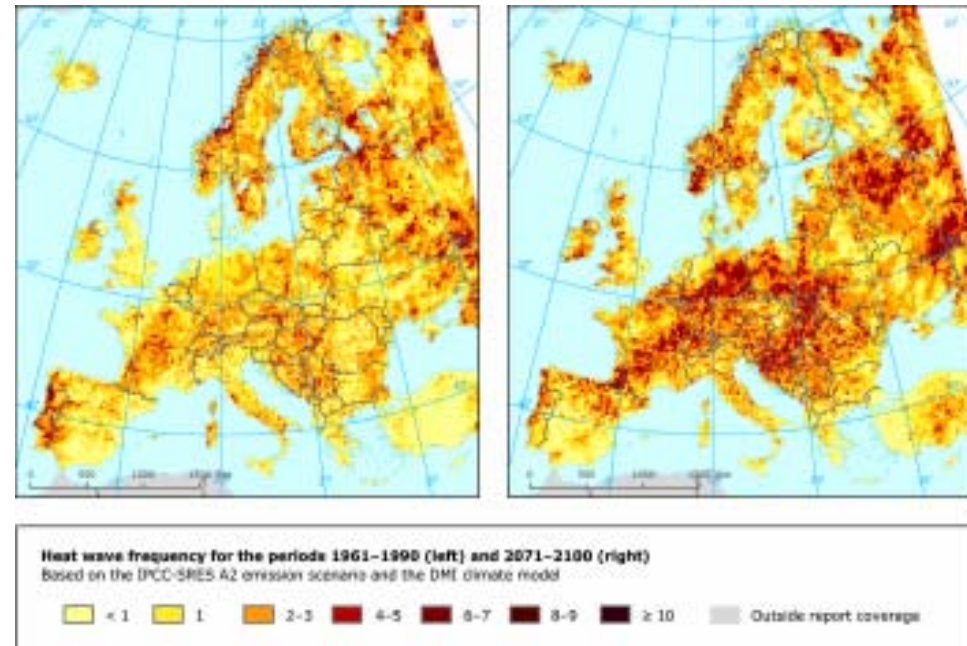
# Shared environmental resources within pan-European area

- Much evidence and understanding
- eg EEA (2007) *Europe's Environment: 4<sup>th</sup> Assessment*
- eg Pan-european marine ecosystems
- Trans-boundary impacts



# Shared experience of changing climate

- Future scenarios of rural development, land use, biodiversity
- Impact assessments eg Arctic Climate Impact Assessment
- Impacts:
  - Water shortage
  - Flood and extreme events
  - Biodiversity shifts
  - Heat stress
  - Migration
  - Trans-boundary impacts



# Environmental assessment neglects climate change

- EA does not systematically address climate change (a few exceptions)
- Espoo Convention: “any effect on the environment including....climate” (Art. 7)
- SEA: some practice eg coastal plans, water resource plans, spatial plans
- Project level EIA more rare (even for mitigation or adaptation projects)
- Policy appraisal also rare: eg EU’s Impact Assessment protocol
  
- Therefore ask why?

# Possible explanations

## Internal to EA:

- Scope of EA too narrow
- EA has become formulaic

## External to EA:

- Time horizons too short
- Lack of policy integration
- Climate change itself difficult issue

# Internal to EIA

## 1. Narrow scope

- SIA and HIA still separate from (eg) ecosystems assessment
- Interactive impacts not well-handled

## 2. Formulaic:

- Reliance on regulations & guidance
- CC guidance lacking (except Canada & UK)
- Atomisation of impacts eg `climatic factors`
- Role of environmental consultants: house-style

# External to EIA

## 3. Time horizons:

- Short-termism (political, financial & personal)
- Little life cycle analysis (incl. decommissioning)
- Reluctance to envisage radically different futures
- Baseline assumed will remain stable into future
- Little use of future scenarios

## 4. Lack of policy integration:

- Policy silos: administrative & political
- Environmental policy integration difficult
- eg: Water Framework Directive 2000 (60)EC

## 5. Climate change a difficult issue?

- Handling uncertainty
- Emphasis on mitigation (UNFCCC; Kyoto)
- Adaptation: more difficult to acknowledge need to adapt, given the mitigation efforts
- Little guidance on interaction of mitigation & adaptation, hence conflicts eg biofuels
- Climate change policy communities different from IA communities eg IAIA

# Recommendations (1): Principles

- Espoo Convention: build on cross-boundary examples eg ACIA; ClimChAlp
- EU Adaptation White Paper 11.08 and national climate change strategies to include SEA and EIA
- SEA and EIA requirements to include climate change
- All: policy learning and exchange

# Recommendations (2): Practice

- Assess
  - impact of climate change on plan/project
  - impact of plan/project on climate change
- Use future scenarios for resilience & robustness
- Make use of available guidance  
eg Canada, UK
- Consistency matrix for mitigation & adaptation
- Use ecosystem approach eg river basins