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 4th 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 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 (UNFCC; 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