BIODIVERSITY -

Our Life Insurance, Our Natural Capital.

How to better integrate and assess it?

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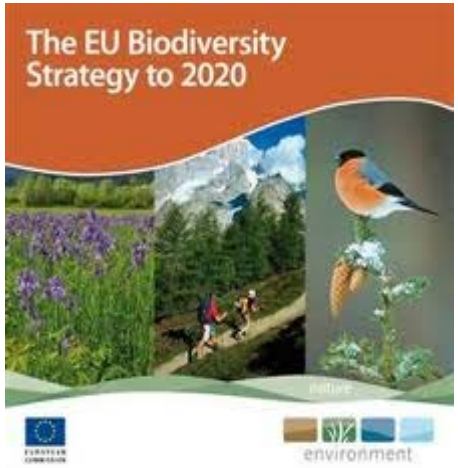
Outline of the presentation

- **EU Biodiversity Strategy to 2020**
  - Long term vision (2050)
  - Headline target (2020)



- **How to integrate biodiversity into EIA and SEA?**
  - Guidance on integrating Climate Change and Biodiversity in EIA
  - Guidance on integrating Climate Change and Biodiversity into SEA

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EU Biodiversity Strategy to 2020

Structure of the EU 2020 Biodiversity Strategy

EU Biodiversity Strategy to 2020

Target 1: Nature Conservation

Objective: Marked improvement in conservation status of habitats and species covered by EU nature legislation by:

- doubling the number of positive habitat assessments
- achieving a 50% improvement in species assessments

EU Biodiversity Strategy to 2020

Target 2: Ecosystem restoration & Green Infrastructure

Objective: Maintain and enhance ecosystems and their services within and beyond protected areas by:

- restoring at least 15% of degraded ecosystems
- establishing '**Green Infrastructure**' throughout the EU

EU Biodiversity Strategy to 2020

Target 3: 'Green' agriculture and forestry in the EU

Objective: Maximise agricultural and forested areas covered by biodiversity-related measures by *inter alia* :

- Rewarding farmers who practice biodiversity-friendly agriculture and/or adopt agri-environmental measures (e.g. permanent pasture, green cover, crop rotation, ecological set-aside, etc)
- Encouraging the adoption of Forest Management Plans that include biodiversity-specific measures

EU Biodiversity Strategy to 2020

Target 4: Make fishing sustainable

Objective: Objective: Achieve Maximum Sustainable Yield (MSY) by 2015 and good environmental status of Europe's seas by 2020 by *inter alia*:

•improving the management of fish stocks

•eliminating adverse impacts on non-targeted species and marine ecosystems (discards, by-catch)

EU Biodiversity Strategy to 2020

Target 5: Invasive Alien Species

Objective: Prevent, control, eradicate IAS and their pathways by:

- developing and implementing EU-level legislation on IAS
- including IAS aspects in other relevant legislation

EU Biodiversity Strategy to 2020

Target 6: Global biodiversity

Objective: Step up the EU's contribution to averting global biodiversity loss *inter alia* by:

- mobilising resources for global biodiversity
- 'biodiversity-proofing' EU development cooperation
- implementing the Nagoya Protocol on ABS
- reducing indirect drivers of biodiversity loss

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BIODIVERSITY INFORMATION SYSTEM FOR EUROPE

Biodiversity Information System for Europe

BISE is a partnership between the European Commission (DG Environment, Joint Research Centre, Eurostat) and the European Environment Agency (EEA). It incorporates the network of the European Clearing House Mechanism.

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Policy | Topics | Data | Research | Countries & Networks

Towards the 2020 biodiversity targets

New in BISE Ecosystem Assessments in Europe

News - Europe

SCALES, 04/10/2012: Job alert: PhD position in "Biodiversity and cosystem Services of Large Mammals" (Frankfurt, ...

SCALES, 04/10/2012: Measuring biodiversity with indicators – new report describes SEBI approach

IISD, 03/10/2012: European Network of Nature Conservation Agencies Discusses Biodiversity Agenda

IISD, 02/10/2012: Event: CEE and Central Asia Capacity-Building Workshop on the Nagoya Protocol on ABS

IISD, 02/10/2012: EU, FAO Announce Call for Proposals on Forest Law Enforcement, Governance and Trade

IISD, 02/10/2012: GEF SGP Rehabilitating Endangered Species in Armenia

News - World

CBD, 02/10/2012: Indigenous agroforestry 'may improve livelihoods'

CBD, 02/10/2012: Making growth sustainable

CBD, 02/10/2012: Half of Great Barrier Reef coral lost in last 27 years

CBD, 02/10/2012: Irreversible Warming Will Cause Sea Levels to Rise for Thousands of Years to Come, New Research Shows

CBD, 02/10/2012: Plants' Carbon-Sinking Capacity Is Much Lower Than Thought

CBD, 02/10/2012: Climate Change Hits Pacific Islands

CBD, 02/10/2012: NGOs seek domestic biosafety legislation

CBD, 02/10/2012: IBiodiversity meet opens with appeal for unity of purpose

CBD, 02/10/2012: UN meet discusses signing of Nagoya Supplementary

How to better integrate Biodiversity in projects' development and EIA/SEA procedures?

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Guidance on Integrating Climate Change and Biodiversity into Environmental Impact Assessment

Environment

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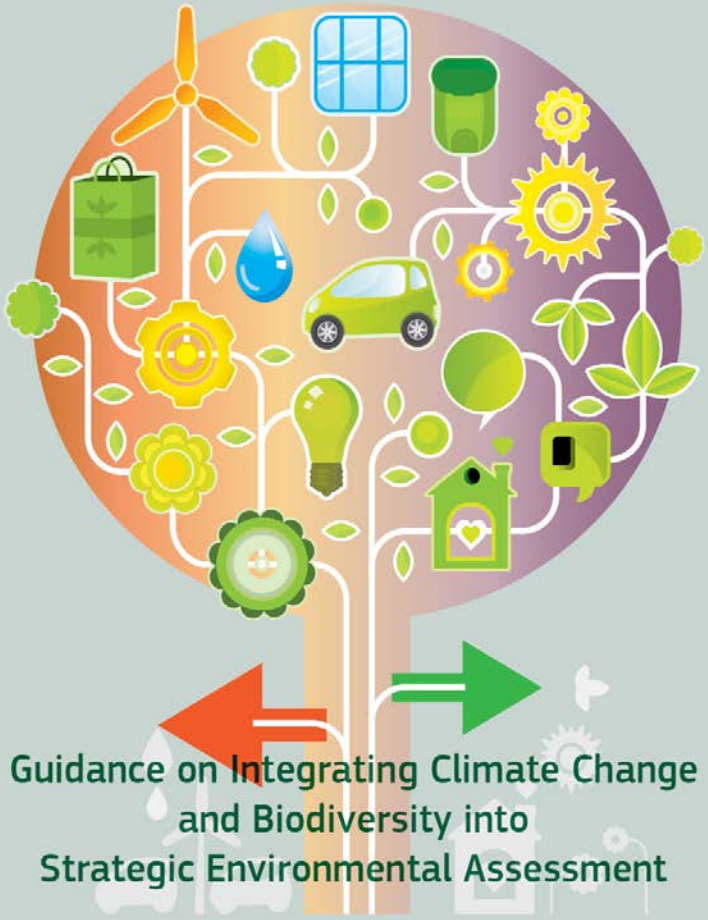

Guidance on Integrating Climate Change and Biodiversity into Strategic Environmental Assessment

Environment

Structure

Foreword

Acronyms and abbreviations

Glossary

Summary

1. **Introduction**
2. **Climate change & Biodiversity in SEA/EIA** (§, Benefits, Challenges)
3. **Understanding Climate change & Biodiversity**

Common chapters

EIA

4. **Integrating CC&B into EIA**

SEA

4. **What are the key CC&B issues?**
5. **How to assess effects related to CC&B in SEA?**

Annexes

1. Further reading
2. Sources of information
3. Tools

Introduction (Chapter 1)

- Nature and purpose of the guidance
- Overview

CC&B in SEA/EIA (Chapter 2)

- Legal basis and spirit of Directive
- Benefits of integrating climate change and biodiversity
- Challenges

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Understanding CC & B (Chapter 3)

Section 1
Climate change

Section 2
Biodiversity

Section 3
Climate change & Biodiversity

Key aspects of biodiversity policy , definitions, plus interactions between CC&B

Policy response	Objectives and targets
The Habitats Directive and the Birds Directive	• The Habitats Directive and the Birds Directive seek to protect sites of particular importance for biodiversity—these sites form a network referred to as Natura 2000 …
The Convention on Biological Diversity (CBD)	• …
Nagoya Protocol	• …
Strategic Plan for Biodiversity 2011-2020 and the Aichi Targets	• …
EU 2020 Biodiversity Strategy	• …
Communication from the Commission: Green Infrastructure (GI) (COM(2013) 249 final) and Accompanying document: Commission staff working paper: Technical information (SEC(2013)155 final)	• …

What are the key CC&B issues?

Climate change mitigation	Climate change adaptation	Biodiversity
• energy demand (industry) • energy demand (housing & construction) • GHG emissions in agriculture • GHG emissions (waste management) • travel patterns and GHG emissions (transport) • GHG emissions from energy production • land use, land-use change, forestry and biodiversity • …	• heat waves • droughts • flood management and extreme rainfall events • storms and high wind • landslides • sea level rise, extreme storms, coastal erosion and saline intrusion • cold spells • freeze-thaw damage • …	• **degradation of ecosystem services** • **loss of habitats, fragmentation** • **loss of species diversity** • **loss of genetic diversity** • **…**

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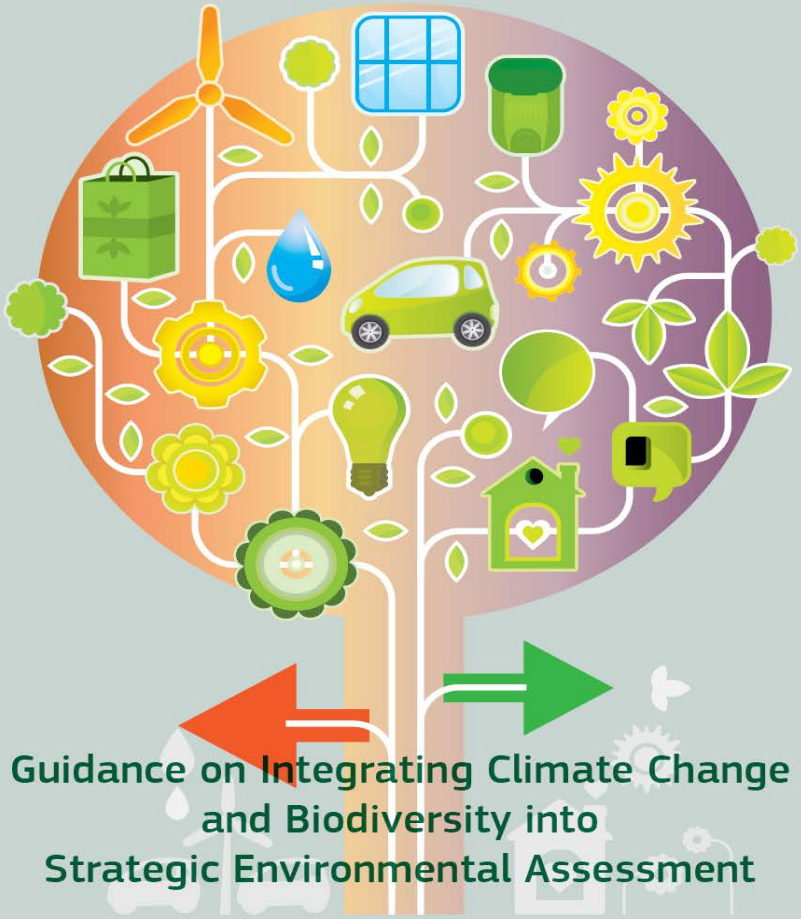

Guidance on Integrating Climate Change and Biodiversity into Strategic Environmental Assessment

Environment

SEA steps	Key considerations (CH. 4: Screening & Scoping; CH. 5: other elements of the SEA process)
Screening	❑ Would implementing the plan or programme (PP) be **likely to have significant effects** on, or be significantly affected by, CC&B issues? Is an SEA required?
Scoping	❑ What are the **key CC&B issues** likely to be? ❑ What is the **current situation** relating to CC&B and how is it likely to **change in the future**? ❑ What is the CC&B **policy context, what are the objectives and targets**? ❑ Who are the **key stakeholders and environmental authorities** with an interest in CC&B and how will they be involved throughout the SEA? What do they think are the key issues? ❑ What are the best **methods, tools and approaches** to help understand and assess the key CC&B issues?
Alternatives and assessing effects	❑ What **alternatives** are there to tackle key CC&B issues? How would implementing them affect CC&B objectives? ❑ How can we avoid the negative effects on CC&B? If we cannot, how can they be reduced or offset? How can the positive effects be **maximised**? ❑ How could CC&B **measures be integrated** into the PP?
Reporting, information & consultation	
Decision-making	❑ How to ensure that the environmental report **clearly explained** how CC&B issues have been identified, how uncertainty has been managed, etc.? ❑ How can CC&B issues be integrated into the final PP?
Monitoring and evaluation	❑ How will the effects on CC&B be **monitored** along with the implementation of mitigation measures and environmental management?

Key messages

ADDRESSING CC&B EFFECTIVELY

- Build them into assessment & early.
- Tailor CC&B to specific PP context.
- Be practical & use your common sense.
- Many options are still open.

CRITICAL CHALLENGES

- Assess PP against the future baseline and key trends
- Long-term and cumulative effects on CC&B.
- Be comfortable with uncertainty (scenarios).
- 'Win-win' or 'no/low regret' options.

IDENTIFYING CC&B ISSUES

- Both impacts of PP on CC&B and CC & natural environment on PP.
- CC adaptation and mitigation interactions
- National/regional/local context.
- Objectives, commitments and targets set in policy.
- Combined application of SEA and Habitats Directives

ASSESSING EFFECTS

- Consider CC scenarios at the outset.
- Evolving environmental baseline trends.
- Assess alternatives that make a difference in terms of CC&B effects.
- CC&B synergistic/cumulative effects.

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Guidance on Integrating Climate Change and Biodiversity into Environmental Impact Assessment

Environment

EIA PROCESS	ELEMENTS OF THE EIA PROCESS ADDRESSED IN THE GUIDANCE	INTEGRATING CLIMATE CHANGE AND BIODIVERSITY … what are the key questions?
Screening (where appropriate)	**Identifying climate change and biodiversity concerns** *Section 4.1*	❑ What are the key CC&B issues likely to be? ❑ Mitigation: impacts of the project on cc (GHG emissions, incl. from land use …) ❑ Adaptation: is the project coherent with cc and how it may respond over time (resilience)? ❑ Which ecosystem services and biodiversity assets may be affected (species & habitats, population quantity and quality, ecosystem degradation and fragmentation)? ❑ How will CC&B interact with each other and with other environmental issues to be assessed in the EIA?
Scoping	**Analysing the evolving baseline trends** *Section 4.2*	❑ What do the environmental trends or scenarios (including extreme climate situations) look like without the project? ❑ How likely are they? What is driving them? ❑ Are they likely to reach a critical turning point or bottom line?
Carrying out assessment and compiling env. information	**Identifying alternatives and mitigation measures** *Section 4.3*	❑ Is the proposed development needed? At what scale? Where? What methods should be used? What is the timescale? ❑ What alternatives would affect the climate less? Which ones would protect biodiversity and permit ecosystems to absorb shocks and disturbances? ❑ What are the 'win-win', 'no-regret' or flexible options that would allow for future changes?
Providing information and consultation	**Assessing effects** *Section 4.4*	❑ What are the cumulative effects on CC&B, taking into account other implemented/authorised/planned projects and the complexity of CC&B issues, as well as other elements to be assessed in the EIA? ❑ What are the assumptions and key uncertainties?
Decision-making and development consent		
Monitoring and adaptive management*	**Monitoring and adaptive management** *Section 4.5*	❑ How can a project be implemented to adapt to CC (building in adaptive capacity) to allow for changes in light of lessons learnt? ❑ How will the effects on CC&B be monitored? ❑ How will the mitigation measures be monitored? How will adaptive management be evaluated?

*Monitoring is not obligatory under the EIA Directive, but is nevertheless used in some Member States.

Key messages

ADDRESSING CC&B

- Build them into the process early.
- Tailor to specific project's context.

IDENTIFYING CC&B ISSUES

- Bring together all the relevant stakeholders.
- Understand how CC&B interact with other issues & with each other.

CRITICAL CHALLENGES

- Consider impact that predicted changes in CC&B will have on project (long timescale, project's resilience & capacity to cope).
- Consider complex nature of CC&B and cumulative effects.
- Be comfortable with uncertainty.
- Base recommendations on precautionary principle and acknowledge assumptions & limitations of current knowledge.

ASSESSING EFFECTS

- Consider CC scenarios at the outset.
- Evolving environmental baseline trends.
- Avoid CC&B effects, before considering mitigation or compensation.
- Focus on ensuring 'no-net-loss' of B.
- Alternatives that make a difference.
- C&B synergies and cumulative effects.

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Nature and Biodiversity

http://ec.europa.eu/environment/nature/index_en.htm

EIA/SEA

http://ec.europa.eu/environment/eia/home.htm