

How ecosystems valuation  
can influence policy making ?

# Taking account of biodiversity in infrastructure projects: the French approach

Christine Lagarenne

CGDD, 1<sup>st</sup> February 2013



# Taking account of biodiversity in infrastructure projects

## I. Infrastructure projects and evaluation

Socioeconomic / Environmental evaluation

Rules to limit environmental impacts

## II. Operational limits

## III. 4 actions for improvement





## *French context: Regulatory framework on environmental offsets*

1976

⋮

2010

**1<sup>st</sup> reference to impact study in the law on nature protection**

**EU laws (Natura 2000, water, etc)**

**Latest evolutions with the 'Grenelle II' law**

**Extension of the scope**

- from protected biodiversity to functional biodiversity (corridors)

**Mandatory description in the authorization act of:**

- environmental measures
- their monitoring

**Control and sanctions:**

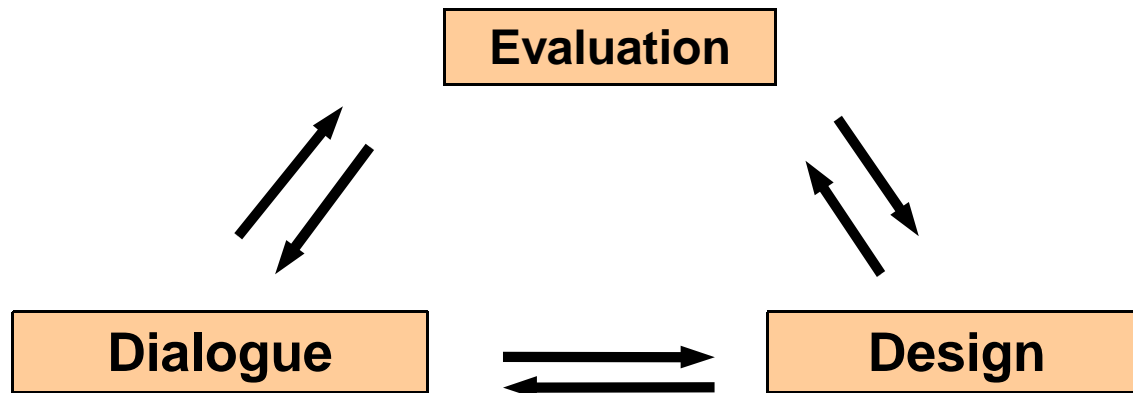
- possible intervention of the environmental authority in case of non-compliance
- impact assessment police



# Environmental assessment process

Continuous + iterative + gradual + selective

All aspects of environmental assessment are interconnected and mutually reinforcing





# Assesment $\neq$ Decision or arbitration

Improving the « quality » of public decision :  
justifying the choices, keeping the public informed,  
accentuating the credibility/legitimacy of the  
measures through :

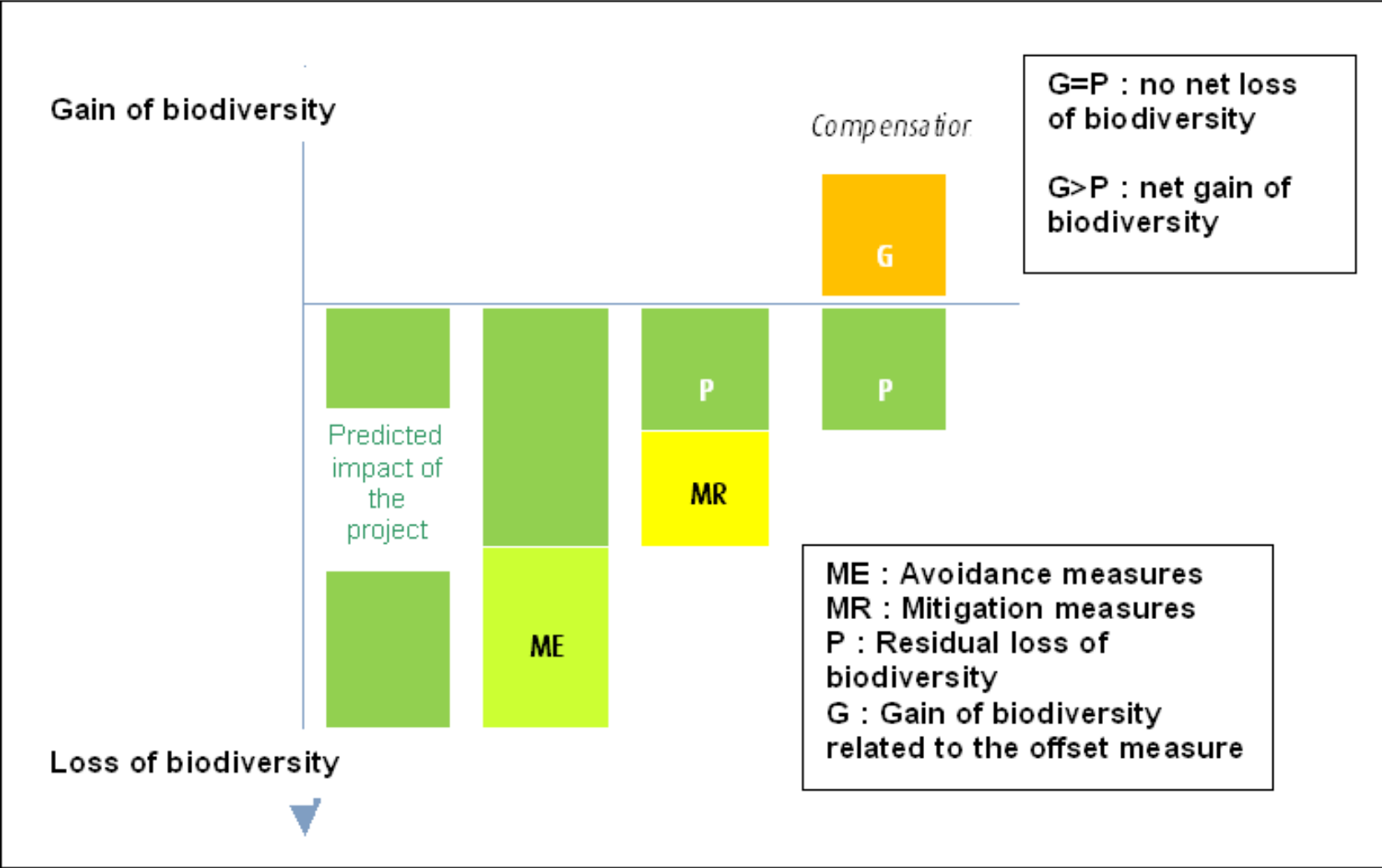
- Shedding light on public decisions and political choices, with transparency
- Ex ante, analyses of the impacts, the efficiency ...
- Ex post, analyses of the results, the achievement of the targets, the costs, ...



# The impact of the project

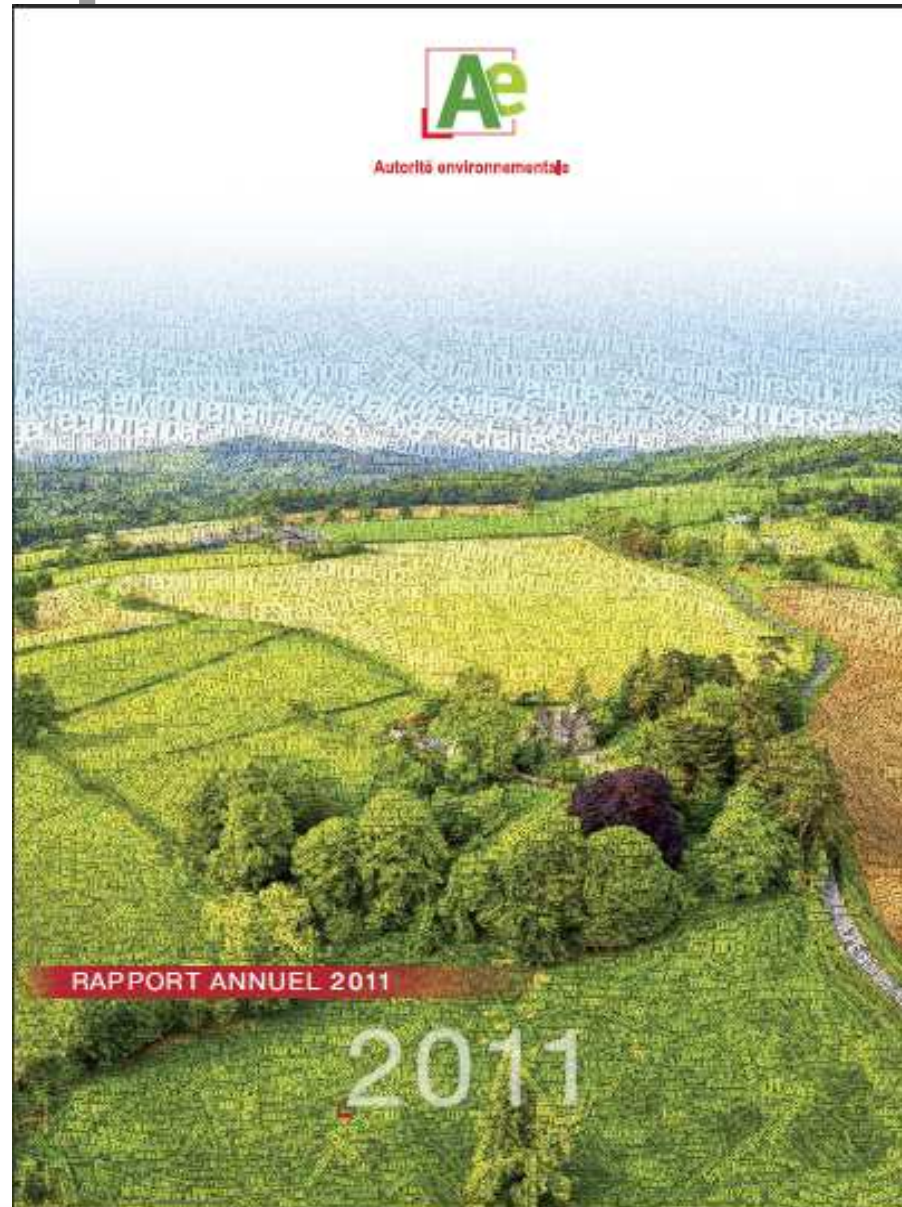
- The environmental initial state before the project
- The direct and indirect, temporary and permanent effects: natural or agricultural land converted to artificial lands, pollutions due to infrastructure uses, development of urbanisation following the infrastructure commissioning...
- The reason why the specific solution has been chosen
- Measures to avoid, mitigate or offset the impacts
- The difficulties identified
- The impact of the programme
- The social costs of the pollutions and nuisances / the social benefits of the infrastructure

# Mitigation hierarchy avoid / minimise / offset



//

# Mitigation hierarchy implementation





# Initial state assessment : the limits identified

- **Too partial -> the flora and fauna inventory is not complete**
- **The area studied is not relevant enough**
- **Not ordered enough (regarding the issues at stake)**
- **Interrelations between different environmental aspects are not studied**

# Biodiversity offsets : identified limits

- **At the stage of the conception of the measures**
  - Beginning point
  - Scale
  - Cumulative effects
  - Land management overview
- **At the stage of the implementation**
  - Land availability
  - Specific skills
  - Monitoring and control
  - Adapted tools to share experience



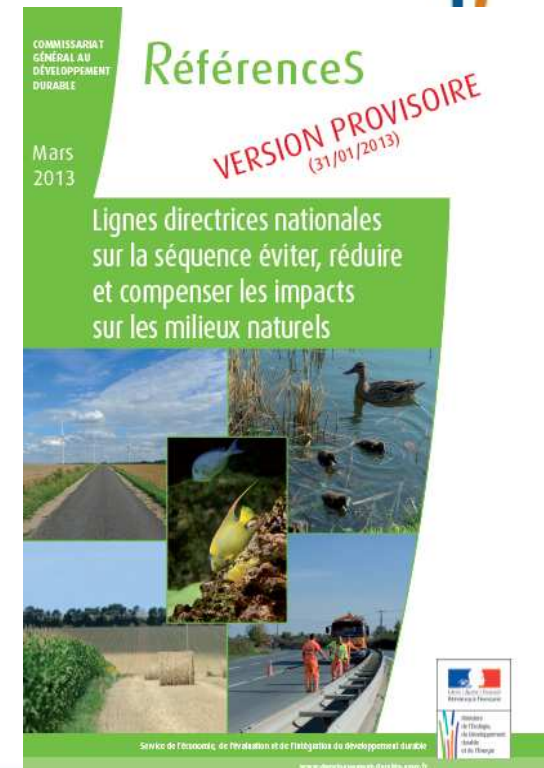
# Action plan to better take account of biodiversity in infrastructure projects

Elaboration of a national doctrine and methodological guidelines (with all the stakeholders : State, local authorities, companies, NGOs, labour unions)

Experimentation on mitigation banking

Evolution of technical guides for socio-economic analysis

French NEA : « EFESE »





# 1<sup>st</sup> action : a national doctrine and methodological guidelines

## Plans and programmes

- Anticipate to avoid (opportunity) and reduce future project's main impacts
- Anticipate land needs for biodiversity offsets

## Consultation with stakeholders at all key stages of the project

- From public debate (opportunity) to monitoring

## Conduct of the project

- Prepare the project: consultants, proceedings
- Avoid and minimise project's impacts (priority): baseline, impacts (prioritised), measures
- **In case of residual impacts**, design offsets: technical arrangements, additionality, equivalence, land purchase or land-use control, possible accompanying measures
- Set offset management (measures, duration and monitoring indicators) and assess costs
- Prepare and examine the permit request (set means and obligations of results in the permit)
- Implement, monitor and control measures (online tool to be developed)

## Glossary

**Stakeholders : State, local authorities, companies, associations, labour unions**



# 2<sup>nd</sup> action : experimentation on mitigation banking

- **Feed back of the first pilot: identification of key criteria for extending the experiment**
- **Local market analysis:**
  - Potential demand for biodiversity units
  - Small projects favoured (synergy)
  - Geographical proximity: balanced distribution on the territory (different species, habitats and functions)
- **Additionality:**
  - Positive management (restoration, rehabilitation) rather than averted risk offsets
- **Land control and durability:**
  - Land purchase (preference) and/or long-term contracts
  - Duration: at least 30 years
- **Credits:**
  - Progressive sell of credits if relevant, based on results
  - Price of the credit based on costs
- **Governance:**
  - Local and national committees





# 3<sup>rd</sup> action : Evolution of technical guides for socio-economic analysis

**Aiming at :**

- **A better articulation between environmental assesment and socio-economic assessment**
- **Improving the valuation of ecosystem services**
- **On the long run, developping model values or model methodologies**



# 4<sup>th</sup> action : EFESE

## TARGETS

International, european and national commitments in order to make ecosystems and ecosystem services preserved and improved, more particularly by the implementation of a green infrastructure and the restoration of at least 15 % of degraded ecosystems

## STRATEGY

Contributing to the improvement of public policies and by eliciting decisions more favorable to biodiversity

Increasing civil society and policy makers awareness of these issues through a relevant communication

Assessing ecosystem, their ecological state, the pressions, the trends of change and by giving a recommendation on future consequences of socio-economic choices

## SUPPORT

French national assessment of ecosystems and ecosystem services

**Merci de  
votre attention !**

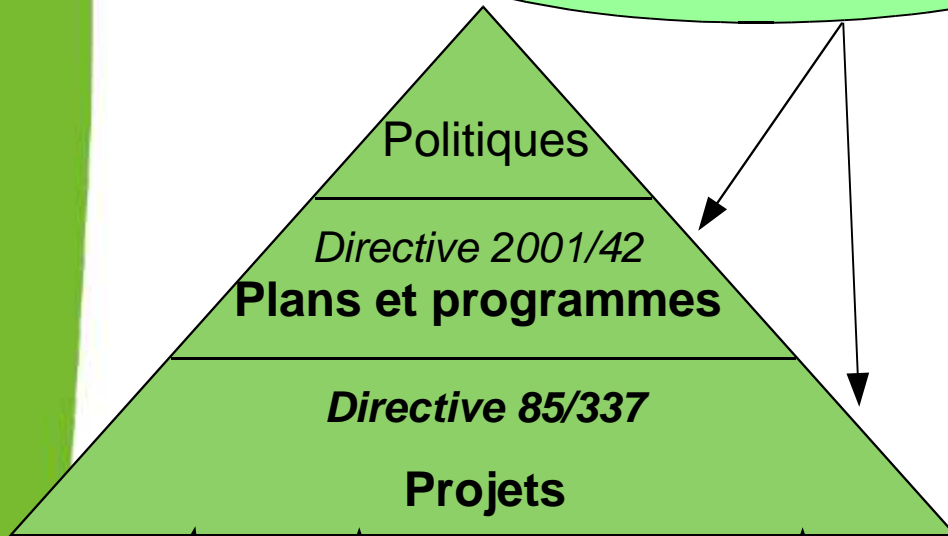




# Cadre juridique de l'évaluation environnementale (UE)

*Directive 79/409 et 92/43*  
**Directive Habitats / Oiseaux**

- Incidences Natura 2000
- Dérogations Espèces protégées



⇒ Évaluation des politiques Publiques

⇒ Évaluation environnementale stratégique

⇒ Étude d'impact sur l'environnement

*Directive 96/82*  
**Directive Seveso**

*Directive 96/61*  
**Directive « IPPC »**

{ **REGIME ICPE => ETUDE DE DANGER**

*Directive 2000/60*  
**Directive Cadre sur l'Eau**

{ • **Dossier loi sur l'eau**

*En France, lois  
de 1976 et de 1982*