Integrating biodiversity in business strategy:
the guide Orée / FRB

Michel Trommetter  Directeur de Recherche INRA
Baseline survey

• Biodiversity and firms
  – Impact / compensatory measures
  – Sponsors of some environmental initiatives: remarkable species and ecosystems

• MEA
  – Ecosystem Services
    • Value of the service / price of the service
    • Consequences of inaction
      – Substitution costs of the service
      – Cost of the production delocalization or cost of stopping production
  – Payment for ecosystem services
    • Compensation for service damages (Natura 2000)
    • Payment for maintenance of a service (Vittel)
Baseline survey

• MEA : 4 types of capital but the bulk of taxation is limited to
  – Manufacturing Capital
  – Human Capital

• To create a market for ecosystem services
  – Indirect use value
  – quasi option value
    • Maintenance of a service access to genetic resources for example
  The goal is to limit environmental crisis

• This approach is not a substitute for park policies and for the management of remarkable species and ecosystems. It is a complement to the existing range of tools.
  – Park policies for example participate to the maintenance of diverse ecosystem services that could be used by firms
Business and biodiversity interdependence indicator

• The outcome of this work is presented in the form of a self assessment in which the businesses convey their own perception to living systems based on a number of criteria
  – Criteria directly related to living systems
  – Criteria related to current markets
  – Criteria related to impact on biodiversity
  – Criteria related to compensatory measures
  – Criteria related to business strategies

• Co-construction of the indicator
  – More than 30 organisations
  – 25 organisations (4 local governments and 21 business companies) have agreed to undertake and publish these self assessments which are intended to encourage other business and local government to reflect with their interaction with biodiversity
## Business and biodiversity interdependence indicator

<table>
<thead>
<tr>
<th>Categories</th>
<th>Design to assess</th>
<th>Criteria</th>
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</thead>
<tbody>
<tr>
<td>Criteria Directly related to Living Systems</td>
<td></td>
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<tr>
<td>Dependence on raw material</td>
<td></td>
<td>Percentage of raw material derived from living organism</td>
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<td>Percentage of raw material derived from living organism from past era</td>
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<td>Dependence on services and technologies derived from living systems</td>
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<td>Utilisation of ecological services (including biotechnologies)</td>
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<td>Bio/eco mimetism</td>
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<td>Management of the variability health and complexity of ecosystems</td>
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<td>Ecosystem variability</td>
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<td>Ecosystem health</td>
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<td>Ecosystem complexity</td>
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### Business and biodiversity interdependence indicator

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<tr>
<td>Criteria related to business strategies</td>
<td>The company’s strategic positioning</td>
<td>Importance of biodiversity for the viability of the company (going concern)</td>
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<td>Social pressure</td>
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<td>Increase competitiveness</td>
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<td>Effects of public relation efforts</td>
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<td>Creation of new market</td>
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<td>Corporate culture</td>
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Business and biodiversity interdependence indicator
Biodiversity accountability framework

• Co-viability business and biodiversity
  – The two could coexist and could mutually enrich themselves
  – Taking into account biodiversity is not a synonymous to competitiveness decreasing

• Coexistence of diverse indicators and co-construction of a common language
  – There exist an Interdependence between socio-economic system and ecological system (BBII)
  – Encourage the co-construction, institutionalisation, appropriation and implementation of batteries of consensually formulated indicators
Biodiversity accountability framework

**Composante A : Comptabilité écosystémique de l'entreprise**

1 - Chiffrer les transactions monétaires associées à la biodiversité

2 - Consolider la comptabilité des flux non monétaires des intrants - sortants associés aux activités de l'entreprise

3 - Fournir des explications de haute qualité sur la nature des interactions entre ses activités et la biodiversité

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**Composante B : Comptabilité écosystémique des relations entre entreprises**

1 - Généraliser la comptabilité écosystémique de l'entreprise à l'ensemble des organisations
   *Des propriétaires, gestionnaires et exploitants des espaces terrestres et maritimes au monde des actionnaires*

2 - Chiffrer les coûts de gestion et de restauration des écosystèmes imputables aux entreprises
   *Participation active des entreprises à la comptabilité des écosystèmes*
Biodiversity accountability framework

• Part A
  – Identifying and evaluating the monetary transactions related to biodiversity
    • Raw materials
    • services
    • Real property and land assets
    • Compensation
  – Improving and consolidating the accounting methods for the non monetary inputs and outputs in connection with the business’s operations
    • Physical account (flow of materials)
  – Providing high quality information about the nature interactions between business’s operations and biodiversity
    • BBII
Biodiversity accountability framework

• Part B
  – Extend ecosystem accounting to all organisation
    • Ecosystemic approach to the value creation covering all of the supply chain for every product, service, …
    • Vertical cooperation: traceability of information
    • Horizontal cooperation: to establish common standard
  – Evaluate the cost of management and restoration of ecosystems to be imputed to business
Biodiversity accountability framework

• To reform taxes and financial system
  – To replace (partially or totally) the taxation on manufacturing capital and human capital with the taxation of all consumption of nature (with a constant amount of the taxes)
  – To build this approach with an approach in term of inaction costs
  – To build a new world for the finance : banks will accord credit according to the risks for the nature and to the biodiversity (new notation criteria)
  – To have an impact on the strategic approach of business companies –more linked to the interaction with living systems-.
Biodiversity accountability framework

• Which consequences for innovation strategies
  – To innovate taking into account the links with biodiversity and living systems as at the level of impacts as at the level of uses
  – To increase the competitiveness (to facilitate the realization of the Porter hypothesis
  – To modify the intellectual property right policy to facilitate the diffusion of innovations.
Conclusions

• To modify the perception of business companies with the question of the interaction of their activities with living systems
  – The economy as a whole interacts directly or indirectly with living systems
  – Take place implicitly or explicitly on a number of levels
    • From industrial sites to surrounding areas
    • Local / international
    • Subsidiaries to parent organisations, …
  – To affect numerous functions and skills within organisations from innovation to production cost control, accounting to taxation, …
Conclusions

• To manage the transition between the two systems to favorise the approach in term of co-viability dynamics
  – The implementation could not be magic.
  – Management or coordination will need to be managed through public policies. The fiscal neutrality must be guaranteed

• Carbon accounting is not able to take into account the co-evolution between biodiversity and business

• The next step of this work is to innovate and to create a new modeling of ecosystem accountability for a business, a local government, ... This would help to identify the levels of actions to be used to convince all economic entities to become involved in ecosystem accounting for relation between organisations.
Merci
IFB/FRB
Oree
Toutes les organisations
Veolia
Joel Houdet (au travail !)