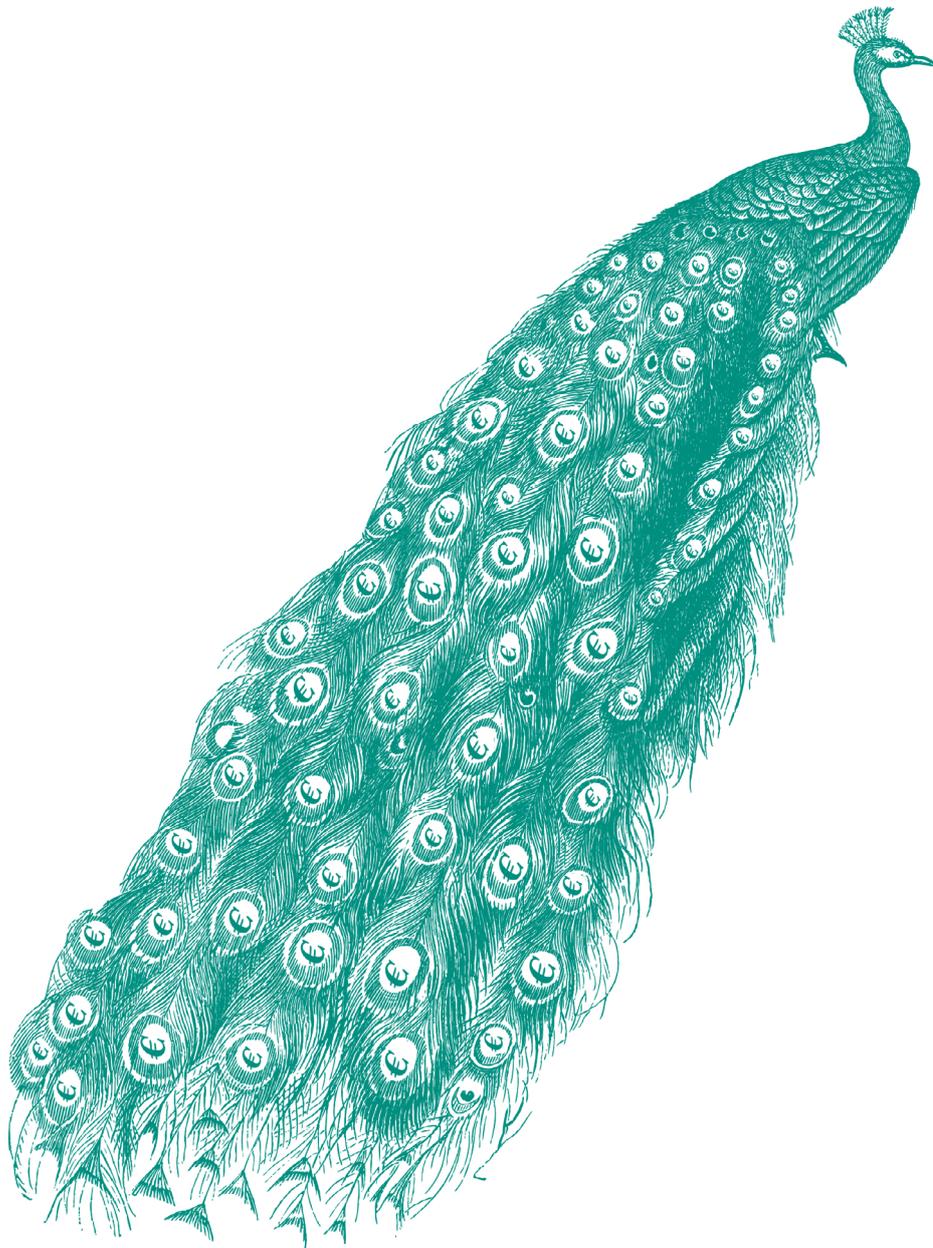


Natural Capital Markets

TOOLKIT FOR FINANCIAL INSTITUTIONS



by the Global Nature Fund and the German Environmental Aid



BACKGROUND

A yearly amount of € 200 to 300 billion^{1,2} is required to avoid a loss of biodiversity. This only corresponds to a fraction of the value of ecosystem services provided by biodiversity, which are estimated to be worth up to € 55 trillion.³ Therefore, in order to raise the required amount to adequately conserve natural capital, further private financial means must be mobilized on top of public funds for the conservation of natural capital.



Natural capital is an economic metaphor for the limited stock of natural assets that provide society with renewable and non-renewable resources and a flow of ecosystem services, the latter being the benefits that ecosystems provide to people and society^{4,5} such as timber and clean drinking water.

Natural capital is mostly a freely available public good meaning that the polluter normally does not pay for the damages caused to ecosystems and neither does the beneficiary pay for maintaining these ecosystems. Instead, these costs are externalised to society. Natural capital markets (partly) internalise these costs by establishing financing mechanisms.

The two natural capital markets covered in this toolkit are biodiversity offsets and payments for ecosystem services (PES). Depending on the amount of government involvement, these systems can be Over The Counter (OTC) deals, markets, or highly regulated payment platforms in which everything from the price to the definition of the traded goods is controlled by the government.

THE FINANCE INDUSTRY AND NATURAL CAPITAL

Because business depends on natural capital, the financial industry is indirectly also concerned. The insurance industry in Europe runs a high risk having to pay for environmental damages under the Environmental Liability Directive. Banks and investors are supplying credit to and investing in companies that rely on natural capital. As can be seen in figure 1, the most important risks and opportunities for financial institutions arise from its customers: companies with an impact and dependency on natural capital. Financial institutions also have a direct impact on natural capital, however, one that is negligible in comparison with the indirect impacts.

Although financial institutions are only involved indirectly, the companies' impacts on natural capital have real consequences for them too. During the Deepwater Horizon oil spill in the Gulf of Mexico in 2010, the creditworthiness of BP was downgraded, thus increasing the risk for financial institutions at the same time.⁶ Similarly, mismanagement of natural capital can lead to increasing scarcity and rising prices. One result of research done by the UNEP-Finance Initiative and the Global Footprint Network⁷ showed, that a 10% rise in commodity prices can lead to

changes in a country's trade balance between 0.2% and 0.5%. Given that this scenario is quite realistic the changes have the potential to affect a country's credit rating and thereby its borrowing costs on international bond markets.

While there is a clear link between financial institutions and natural capital, only few participate in offset schemes or PES programmes, mainly multilateral financial institutions and development banks. Some development banks currently invest in PES schemes while many multilateral financial institutions have policies that try to limit the impact of their clients on natural capital by creating policies that require the application of the mitigation hierarchy (see figure 2 on page 6) or offsetting.

THE BUSINESS CASE FOR FINANCIAL INSTITUTIONS

Not integrating natural capital into the core business of financial institutions can pose risks for them. Natural capital markets represent new fields of business.

1. New business opportunities – new opportunities for financial institutions and related companies arise as natural capital markets are established. The opportunities for financial

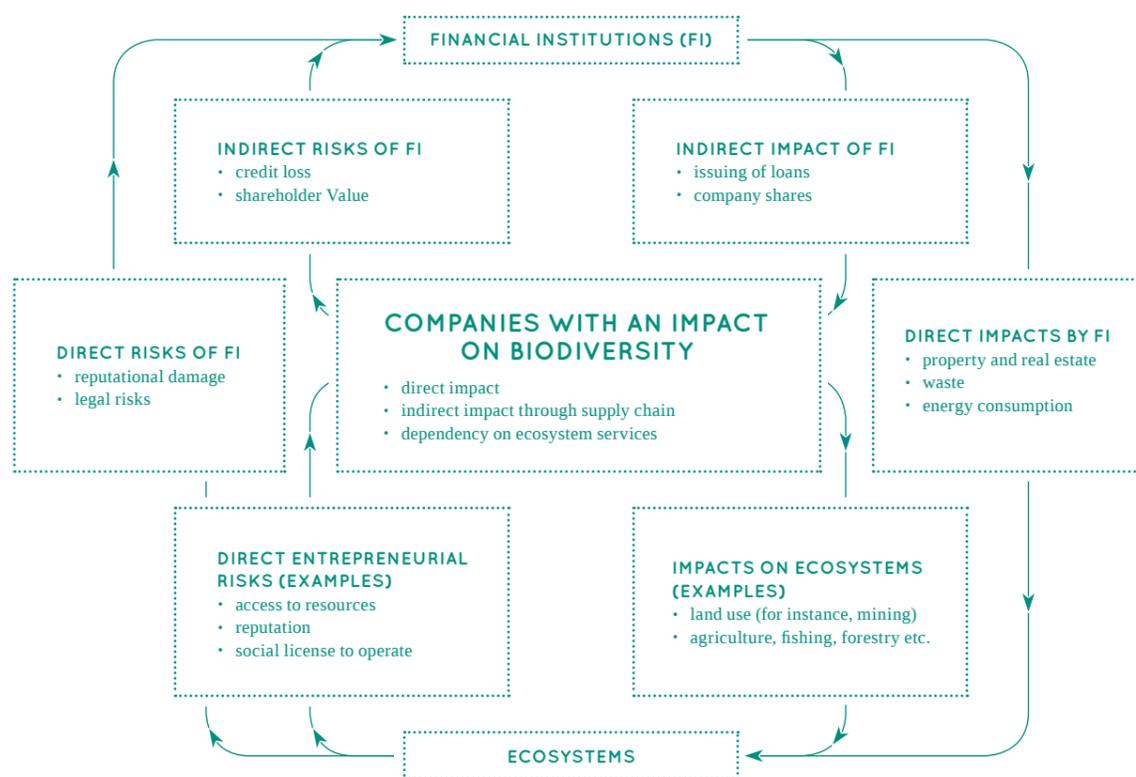


Figure 1: Relation between financial institutions and natural capital.⁸

institutions to invest in PES are limited and the potential return on investment usually takes too long. Currently, mainly companies investing in real estate are active in habitat banking. However, as biodiversity offsetting scales up opportunities for financial institutions will arise: in addition to debt and equity financing, opportunities arise for specialized institutions that provide advisory services. Finally, financial institutions can also act as brokers of offsets when managing a habitat bank. An example is CDC Biodiversité created by Caisse des Dépôts, a public bank in France (see Box, p.7).

2. Reduce operational risk exposure – By adopting high standards for clients to integrate natural capital into their operations, financial institutions can limit their operational risk exposure. The European Bank for Reconstruction and Development for example has a policy with one of the objectives being a net gain of biodiversity

as a result of their lending. In this way, the bank reduces its operational risk caused by the exposure of their creditors to natural capital risks. Standards for offsets are also available, such as the Standard on Biodiversity Offsets, developed by the Business and Biodiversity Offsets Programme (BBOP).⁹

Insurers too can reduce their risk by offering lower premiums for clients investing in natural capital thus reducing the likelihood of reimbursement for damages caused by floods or other natural disasters. Ex ante investments in upstream wetlands can for example reduce flood risks.

3. Influence the regulatory process – By engaging in offsets schemes and PES programmes in an early stage, financial institutions can use their experience and influence the legislative processes that lead to the establishment of new regulatory frameworks.

4. Reputation – By increasing the uptake of natural capital aspects into its operations, financial institutions can improve their reputation. Several banks have for example adopted Performance Standard 6 (PS6) developed by the International Finance Corporation (IFC).¹⁰ The standard is seen as a benchmark for credit policies. This standard defines how to sustainably manage biodiversity and ecosystem services and how to use the mitigation hierarchy to decrease the impact throughout a project’s lifecycle. However, PS6 mainly applies to project financing, representing only a negligible part of business of most financial institutions.

Other financial institutions have signed the Natural Capital Declaration (NCD)¹¹ or can use the Biodiversity Principles of the VfU¹² (Association for Environmental Management and Sustainability in Financial Institutions) in Germany. By signing the Natural Capital Declaration, financial institutions commit themselves to change their business models reflecting the materiality of natural capital for the financial sector and to develop individual strategies integrating the conservation of natural capital into their business practices. The Biodiversity Principles offer a recommended course of action.

NEXT STEPS

To decrease reputational risk, financial institutions can integrate the mitigation hierarchy into their operations. By using the mitigation hierarchy while at the same time identifying no-go areas, risks can be minimised, a practice already adopted by some financial institutions, especially multilateral ones.

- As a first step, the IFC PS6 can be adopted and applied for project financing, even for small projects. However, key is a proper implementation of the mitigation hierarchy and defining no-go areas as without them, offsetting is a license to trash which will have implications for the reputation of the financial institution involved. In this way, reputational risks can be avoided and natural capital conserved.
- Financial institutions that adopted the UN Equator Principles¹³ already apply a part of the mitigation hierarchy for a limited set of operations. However, these principles only apply

to project financing and related services thus only covering a fraction of activities pursued by financial institutions.

Beyond project financing enforcement and control of the clients’ application and adherence to the mitigation hierarchy becomes almost impossible. In order to further integrate natural capital into operations, there are several possibilities:

- Sector specific credit policies influence a larger part of operations but apply on a scale on which it is often not possible to demand the implementation of the mitigation hierarchy. However, these policies are only of limited use at the portfolio level.
- On the portfolio level, signing the Natural Capital Declaration can help as working groups set up under the declaration currently develop metrics to evaluate bonds and equities by integrating natural capital considerations. In the meantime, financial institutions can start implementing the biodiversity principles developed by the VfU. In addition, environmental, social and governance (ESG) criteria can be used to increase the social and environmental portfolio sustainability.

Become active in offset schemes and PES programmes.

- Some financial institutions such as CDC Biodiversité have become active in the offset market. financial institutions can be active in all or some stages of offsetting, from securing land to the long-term management of the site. Alternatively, financial institutions can also become active in issuing credits or performing brokering activities to bring together companies requiring offsets and companies or private persons offering offsets together. In PES programmes, financial services are especially needed in the beginning of the project in order to finance the scoping assessment. However, it is questionable whether it is commercially vi-

able to invest in PES programmes as so far the only active financial institutions are development banks that invest in government-mediated programmes.

BIODIVERSITY OFFSETS

Compensation measures or biodiversity offsets are required by law in some countries like Germany and comprise measures taken to compensate for impacts on habitat types and species. They are implemented after measures to avoid, reduce and restore (the mitigation hierarchy, see figure 2) have been applied.

Compensation measures or offsets can be expressed in credits representing a compensation measure of a certain size and quality. Several credits can be bundled in so-called habitat banks, allowing building up a surplus of credits. These credits can then be sold to other companies or they can be saved for future impacts. Habitat banks also allow for larger compensation areas to be created instead of many small areas, contributing to more resilient natural capital.

In countries like the USA, Germany and Australia where habitat banks and habitat bank like systems currently exist, companies and other infrastructure project developers which must comply with compensation rules, can use habitat banks to increase planning security and help to reduce their costs for search, planning and realization of compensation measures.

Offsets and habitat banks work best in a legal framework or a strict voluntary offset framework.

To protect additional biodiversity, offsets need to be combined with a goal of achieving a net gain of biodiversity. Attention must also be given to which aspects of biodiversity can be replaced with similar aspects at another spot. In some cases, the uniqueness of an area might lead to the creation of no-go areas in which no impacts can take place because they cannot be compensated by offsets.

PAYMENTS FOR ECOSYSTEM SERVICES (PES)

Many enterprises use ecosystem services such as i.e. clean water or a stable climate without investing in the permanent conservation of natural capital producing these important ecosystem services. With payments for ecosystem services (PES) the beneficiary pays for the provision and thus the conservation of biodiversity and ecosystem services. More precisely, it can be defined as a direct, voluntary, conditional payment by the user of ecosystem services to the supplier of ecosystem services.

The classical example is a brewery requiring clean water for production. The quality of water decreases for users downstream due to the upstream usage of fertilizers and pesticides. One option for the brewery downstream would therefore be to voluntarily pay upstream land owners within the scope of a PES-Programme under the condition that the use of fertilizers and pesticides is reduced. The land owners are thus compensated for any harvest losses, while the brewery benefits from the water purification services of intact ecosystems and can thus

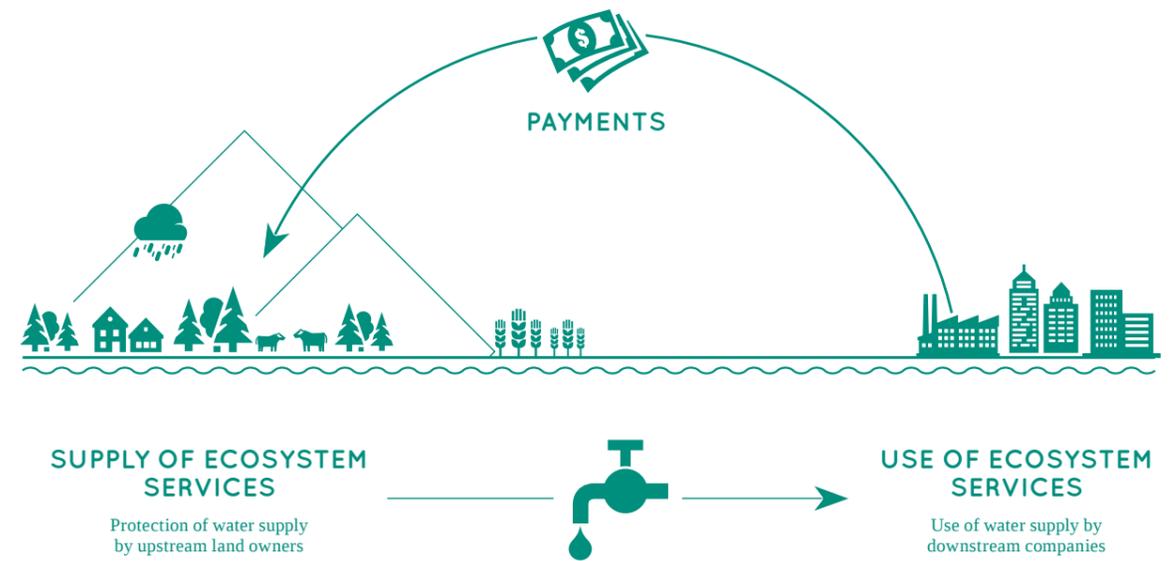


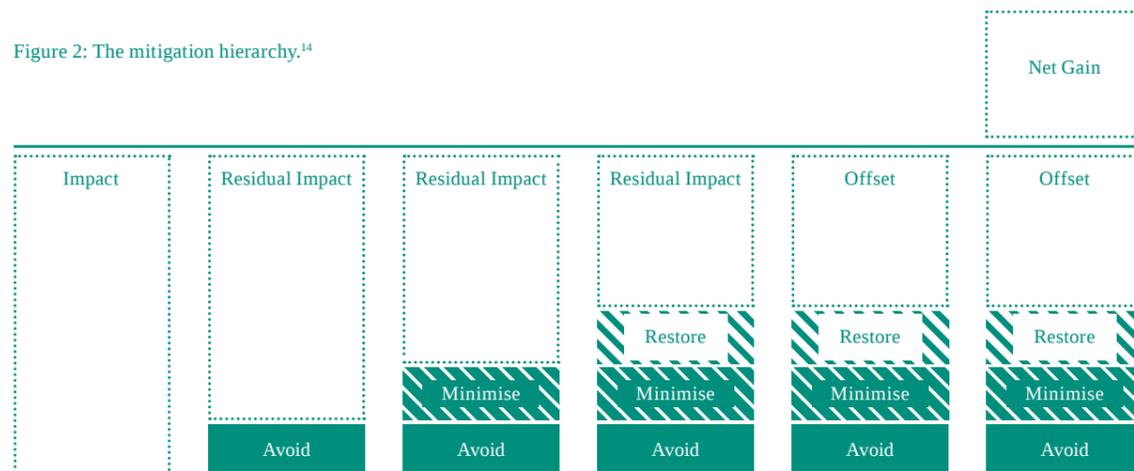
Figure 3: Example of a payment for ecosystem services (PES) scheme.¹⁵

secure its business foundation not having to invest in costly water purification systems. As is the case with PES programmes, the brewery is neither paying to compensate its impact on natural capital nor are any credits created or traded, even though the beneficiary pays for the usage of ecosystem services.

However, opportunities for a PES scheme are limited to cases in which an ecosystem service

cannot be substituted and is of strategic importance to a company. Even then, upfront costs or capital expenditure (capex), as well as the operational expenditure (opex), can be relatively high, so that it is not always worthwhile pursuing the establishment of a PES programme. Finally, risks remain high that despite the investments, the ecosystem service is negatively affected by other actors.

Figure 2: The mitigation hierarchy.¹⁴



CDC BIODIVERSITÉ: A HABITAT BANK IN FRANCE

A subsidiary of the Caisse d' Epargnes, the CDC Biodiversité has started pioneering habitat banking in France. CDC Biodiversité is active in all phases of habitat banking: identifying and securing the proper habitat, contracting a team for the different phases like feasibility studies, environmental baselines, realising the offset, long-term management accompanying measures.

Currently, CDC has 1,729 ha under management in two sites in the South-West and the South-East of France. One site is a general habitat bank which will be managed for 30 years. The other site was acquired to compensate the impacts of a highway and will be managed for the next 60 years. Due to scale efficiencies, CDC can implement offset measures more efficiently than if impacts would be offset individually.

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