

Third Impact Evaluation of the Green OAT Evaluation Council: Subsidy to the National Forestry Commission of France

The Green OAT Evaluation Council is in charge of evaluating the environmental impact of the eligible green expenditure financed by the Green OAT, the French sovereign green bond. This document sums up the opinion of the Green OAT Evaluation Council¹ on the environmental impact of the public subsidies to France's national forestry commission, the *Office national des forêts* (ONF). This opinion has been informed by an evaluation of the environmental impact of public forest management, provided to the Council and published along with this opinion.

Main observations:

- ➔ The Green OAT Evaluation Council welcomes the evaluation, notably the quantitative estimates of the contributions of public forest management to climate change mitigation and biodiversity protection and the qualitative assessment of the contributions of public forests to climate change adaptation.
- ➔ The evaluation represents a major contribution to the advancement of impact reporting in the green bond market, as it provides a methodology for evaluating the contribution of public forest management to biodiversity protection and climate change mitigation, taking into account both the preservation and enhancement of carbon stocks and the greenhouse gas emissions avoided through the use of wood instead of high-emitting materials in the construction and energy sectors.
- ➔ The quality of the evaluation meets high academic standards. Its quantitative assessments are in line with recent literature and based on a state-of-the-art model, and its qualitative elements are robust.
- ➔ The transparency and independence of the evaluation process were ensured by reviews by independent experts.
- ➔ The Green OAT Evaluation Council endorses the main results of the evaluation of the ONF subsidy, in particular that the associated expenditure contributes significantly toward France's objectives in terms of climate change mitigation, biodiversity protection and climate change adaptation.

1. Introductory remarks

The Council notes that France aims to achieve carbon neutrality by 2050 to contribute to the objectives of the Paris Agreement. It is a demanding target that requires ambitious policies to reduce greenhouse gas emissions. As the forest sector represents a sink for about one-fifth of annual national emissions, both preserving this sequestration capacity and contributing wood to serve as a substitute for high-emitting materials in the construction and energy sectors are key pillars of a strategy in line with this goal. In order to reach this objective, France's National Low-Carbon Strategy aims to use carbon sinks and increase timber harvesting to achieve net zero emissions and net zero land take by 2050.

For centuries, areas of France's forests have been managed by the State. **The ONF is the manager of public forests** (both State- and locally owned) and plays a central role in enforcing

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France's forestry regulations, which aim to protect public forests, govern their operation and ensure the integrity of the land. With €226.3 million allocated over 2017–2018, the ONF represents the fifth largest eligible expenditure in terms of budgetary cost for the same period, within the perimeter of eligible green expenditure defined for the Green OAT, and the only one that pertains to the forestry sector.

2. Main results of the evaluation provided to the Council

The study assesses the environmental impact for three environmental objectives defined in the Green OAT framework: climate change mitigation, climate change adaptation and biodiversity protection.

The study finds that **public forest management has a positive effect on:**

- **Climate change mitigation**, as public sustainable management practices are associated with significantly larger harvests, amounting to an estimated 2.7 million of cubic metres of wood per year. Based on the current distribution of wood use and wood substitution, **the additional harvest associated with sustainable management practices may potentially deliver a modest reduction in atmospheric CO₂ levels, mainly from the use of timber as a substitute to high-emitting materials or fuels (e.g. cement, steel, fossil fuels).**
- **Climate change adaptation**, as **public management allows for clear methodology to be developed and consistently implemented, from which localised solutions can be developed for forest adaptation, fire risk mitigation and protection against natural hazards.** It also allows for data to be collected, contributing to scientific knowledge.
- **Biodiversity protection**, as **public management** involves creating a connected, effectively managed and representative ecological network, allowing for targeted action to be taken to protect vulnerable species. **Public forests have 34% of their surface area protected, compared with 23% for private forests, and 2.9 times more common birds observed annually per hectare in public forests.**

Overseas forests represent 60% of the forests managed by the ONF and 24% of France's forests. They are home to some 80% of France's biodiversity and represent a substantial carbon sink. The ONF's management activities in these regions help protect biodiversity through the creation of protected areas and nature reserves, and protect public land against illegal mining and deforestation. As a result, the forest cover in France's overseas forests has decreased by only a very small amount since 1990.

The study also finds that **the added value of the ONF is that it is able to provide multifunctional management, invest in innovation and produce data and scientific knowledge.**

The study uses a counterfactual analysis based on the fact that the subsidies granted to the ONF over the years have allowed it to ensure public management of France's forests with specific environmental objectives and results. Had an annual subsidy not been granted to the ONF over several decades, the country's forests would have been managed much differently. Using this counterfactual, the methodology used in the study is as follows: for each objective of the evaluation, it provides evidence of the stakes for public forests, how ambitious public management policies are from an environmental perspective, how effectively these policies are being implemented and the resulting impacts. At each step, where relevant and depending on data availability, the study looks at private forestry practices, compares results and discusses how differences in these results may be attributed to public management practices. As discussed with the Council, other counterfactual scenarios were considered before being excluded for methodological reasons and due to limited access to data.

3. Quality of the evaluation

True independence is fundamental to the credibility of any evaluation, and the Council considers the involvement of referees to be very important. To ensure alignment with best practices in this area, terms of reference were defined by the Council, with the support of the Secretariat, and used to frame the assessment. Two referees, Marion Vinot-Gosselin (INRAE)² and Jean-Luc Peyron (ECOFOR)³, were appointed to closely monitor the evaluation process. An intermediary report was presented to the Council for review and comment. The Council then endorsed the final version of the report. The impact assessment study was conducted by the General Commission for Sustainable Development.

It is the Council's opinion that **the study meets the objectives** defined by the terms of reference. In particular, the Council appreciates the long-term nature of the counterfactual scenario, considering that many current environmental benefits can be attributed to the impacts of management practices over the long term. It also appreciates the specific elements on the environmental impacts of overseas forest management.

The Council wishes to highlight the **innovative nature of the study, as it contributes to the development of impact reporting methodologies**, in particular regarding climate change adaptation and biodiversity protection. The study is one of the first impact evaluations to have been conducted on a green bond in relation to these objectives.

The Council also notes some potential areas of improvement for future studies, where possible and appropriate: information about private forest management could be further developed when a comparison between public and private forest management is used for the counterfactual scenario; alternative hypotheses could be tested in the model used to quantify the robustness of impact estimates.

4. Conclusion and next steps

The Evaluation Council welcomes the results of the study on the ONF. It is an innovative study that lays the groundwork for impact reporting on biodiversity protection, climate change mitigation and climate change adaptation for the forestry sector.

The Council wishes to underscore the high quality of the evaluation process. The study meets high academic standards and was supervised by referees, guaranteeing its independence and quality.

The Council is confident that this third impact evaluation will be useful to other green bond issuers and contributes to the advancement of evaluation best practices on the market. In particular, this study could be of use for sovereign issuers focusing on climate change adaptation, as it develops a methodology for impact reporting on this issue. Impact evaluation and transparency are key factors to support the scaling up of green finance.

² Marion Vinot-Gosselin is a specialised engineer in forest ecology at INRAE (National Research Institute for Agriculture, Food and Environment) in the Biodiversity and Forest Management team of the Forest Ecosystems research unit. She is in charge of knowledge production and transfer on the relationships between forest management and biodiversity, particularly forest biodiversity monitoring.

³ Jean-Luc Peyron is a doctor of economics. He currently is the head of ECOFOR, a public interest group which aims to support, lead and promote research and expertise programs on temperate and tropical forests. He has chaired, at the European level, an intergovernmental action programme on climate change and forests, named ECHOES (Expected climate change and options for European silviculture), and at the international level, a research group on economics and forestry accounting. He is a member of the French Academy of Agriculture and a board member of the International Union of Forest Research Organizations (IUFRO).

The publication of this study is a major step for the Green OAT as it confirms the important role of the Evaluation Council. This impact reporting ensures the credibility and transparency of the Green OAT.