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Green OAT – Evaluation report

Subsidy to the National Forestry Commission of France

Impacts on biodiversity, climate change adaptation and mitigation

November 2020

The Green OAT Evaluation Council

- In January 2017, France issued its first sovereign green bond (OAT 1.75% 25 June 2039) and committed to publishing several reports to the benefit of citizens, investors and the civil society:

  ➢ An annual allocation and performance report (June 2018, July 2019 and July 2020);
  ➢ Impact reports assessing the ex-post environmental benefits of expenditures associated to the Green OAT. The Evaluation Council of the Green OAT is in charge of supervising and publishing the latter reports.

- The Council is chaired by Mr. Manuel Pulgar-Vidal, former Minister of Environment of Peru, president of the COP20 and head of the WWF Climate and Energy Practice, with eight other independent members, experts in green finance or public policies evaluation.

- The French ministry of Ecological Transition and that of Economy, Finance and the Recovery are jointly in charge of the Council's secretariat.

- The first report (2018) evaluated the Energy Transition Tax Credit (CITE), the second one (2019) focused on the French Waterways.

- The present report, which deals with the National Forestry Commission of France, is thus the third report submitted to the Council.
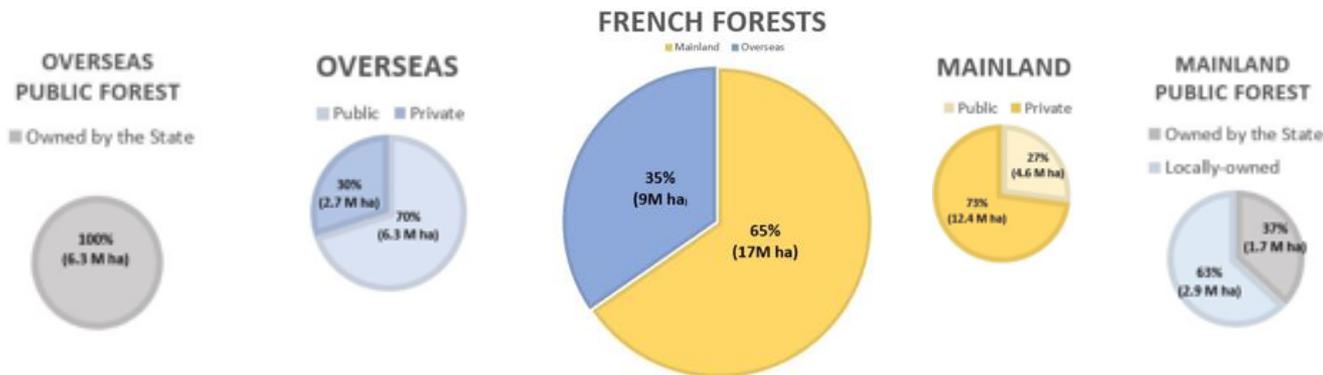
Evaluation process

- The evaluation of the National Forestry Commission of France had to comply with the specifications set out by the Council, in March 2019, with the support of the Secretariat. These terms of reference are available for consultation on the AFT website. The Council discussed interim reports in November 2019 and June 2020.

- The Commissariat Général au Développement Durable was commissioned to carry out the evaluation study.

- The Council appointed two scientific personalities as independent referees. The final version of the evaluation report takes their comments into account.

  - 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.

  - 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 forestry), 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).

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Office national des forêts (ONF): the National Forestry Commission of France

- The ONF was created in 1966.
  - It manages 10.9 million hectares (around 40%) of French forests: 4.6 million ha in mainland and 6.3 million overseas.
  - It mostly self-funds through commercial activities: only €175 M/y out of a budget of €860 M/y is funded by subsidies.
  - The ONF has to implement multi-functional management: production, ecosystems protection and visitors' reception.
  - Its activities include forest management (notably sustainable timber production), land management, improvement and cutting programs, maintenance in public forests and some general interest missions, as well as consulting

- This evaluation report was elaborated in a specific context:
  - The Green budgeting report qualifying state spending associated to the ONF subsidy as beneficial to the environment.
  - The EU climate taxonomy regulation, with a chapter dedicated to the sustainability evaluation of forestry activities.

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Assessment methodology (1)

- The objective of the study is to evaluate the impact of the public subsidy on ONF's contributions to :
  - ➢ climate change mitigation,
  - ➢ climate change adaptation and
  - ➢ biodiversity protection.

The evaluation relies on a counterfactual scenario..

- Counterfactual design:
  - ➢ Mainland: the counterfactual scenario supposes that the subvention would be removed. The management of public forests would not be public anymore, hence public forests would be managed by a private operator. ONF actions which demonstrate added value with comparison to this counterfactual have been considered as additional.
  - ➢ Overseas: the counterfactual scenario supposes that the subvention would be removed as well. But in this case it has been supposed that, without the ONF, theses forests would not be managed at all (since there is practically no private management of French overseas forests). Hence, every ONF action overseas has been considered as additional.

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Assessment methodology (2)

- For each one of the three environmental objectives discussed in the report, the analysis distinguishes four aspects:
    - ➢ Stake: for a given environmental stake, how concerned is the ONF in its management approach?
    - ➢ Ambition: what is the level of ambition of the ONF, when the stakes are high?
    - ➢ Implementation of relevant practices: how effective is it?
    - ➢ Evidence: is there any theoretically-funded evidence that practices adopted by the ONF have a positive environmental impact (indirect evidence), or are there quantified indicators available that demonstrate such impact (direct evidence)?

A comparison is made, at each step, between public and private forests, when relevant. Differences in results are analyzed, and underlying causality is discussed to decide whether they can be explicitly attributed to the action of the ONF.

- The impact of management practices associated with the public subsidy may vary depending on the time-scale considered:
    - ➢ The impact of some practices can be assessed after a decade or so (for instance protection of endangered species)…
    - ➢ … while others (such as the choices in tree species or domain integrity) are key for forest structure after 60 years or so.

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Main conclusions of the report

Based on the above-mentioned methodology, it was possible to find that the public management of forest has a positive effect on:

- Climate change mitigation
  - ➢ Public sustainable management is associated with a significantly higher harvest, the additional volume amounting to an estimated 3 million cubic meters of wood per year.
  - ➢ It drives a modest and uncertain reduction of atmospheric CO_2 concentration, mainly due to the substitution of timber to emitting materials.

- Climate change adaptation
  - ➢ Elaboration of relevant, homogeneously implemented methodology to develop localized solutions for forest adaptation, fire risk mitigation and protection against natural hazards.
  - ➢ Data collection, which contributes to scientific knowledge (public good).

- Biodiversity protection
  - ➢ Creation of a connected, effectively managed and representative ecological network.
  - ➢ Implementation of targeted actions on some vulnerable species.
  - ➢ As a result, public forests have 34% of their surface protected (according to IUCN protected areas typology), against 23% in private forests, and 2.9 times more common birds observed per hectare, per year.

The added-value of the ONF lies in the combination of
  - ➢ a multi-functional management,
  - ➢ a strong investment in innovation and
  - ➢ the production of data and scientific knowledge (which is particularly valuable in a context of uncertainty in the face of climate change.)

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Opinion of the Evaluation Council

- 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.