

Terms of Reference for the Impact Evaluation of the Public Service Grant to the National Forestry Commission of France

1. Background

Environmental impact reporting is a key issue in the green bond market. At the time of the initial issuance of the Green OAT in January 2017, France committed to provide a thorough *ex post* environmental impact evaluation of eligible green expenditure, overseen by the Green OAT Evaluation Council.

France boasts over 25 million hectares of forest: 17 million hectares in mainland France – 31% of its land area – and another 8 million hectares in overseas regions (mainly French Guiana). These forests are a crucial resource for the French economy. Out of a total 2.7 billion cubic metres of standing timber, some 45 million cubic metres are harvested and sold to the construction, furniture, packaging and energy industries each year.

Forests are also a treasure trove of biodiversity. The forests of mainland France are home to 138 tree species, 73 mammal species, 120 bird species and 72% of mainland plant life, which explains why 46% of Natura 2000 sites¹ are woodlands.

Forests also play a crucial role in the climate challenge as carbon sinks. Every year, France's forests sequester some 60 million tonnes of carbon, the equivalent of 15% of the country's greenhouse gas emissions. However, many French forests, mostly private ones, are aging and their timber is harvested little if at all. They are near saturation as carbon sinks and more vulnerable to climate change and biological threats. Faced with this situation, France has introduced a strategy for the active and sustainable management of forests and the timber industry, to foster more dynamic forest ecosystems.

Funding for this strategy comes from the €467.7 million in Green OAT proceeds allocated in 2016 and 2017 to sustainable forest management and sustainable timber industry development. The strategy mainly entails development and planning work and the long-term management of private and public forests. This mission falls primarily to France's National Forestry Commission, the *Office national des forêts* (ONF), which received a total of €353.3 million in public subsidies in 2016 and 2017.

The ONF manages public forests in France. Its objectives are threefold: to grow and harvest timber to meet the needs of the industry; to preserve the environment; and to provide services for the public. Managing over almost 12.6 million hectares (4.6 million hectares in mainland France and 8 million in France's overseas territories, mainly in French Guiana), the ONF seeks to expand its knowledge of forest geography and characteristics (via field and satellite observation, monitoring of biodiversity, etc.) to enable it to manage forests over the long term and ensure that trees are harvested at a rate suited to their natural lifespans while replacing old growth with new trees. This entails conducting the work and making the investments necessary for forest renewal. In 2017, the ONF managed to maintain a 99.1% share of management for mainland national forests and 95.2% for overseas forests.

2. Purpose and content of the report

The ONF subsidy evaluation will assess the *ex post* impact of these subsidies on the environmental performance of public forest management and the forest industry. It will feature a non-technical summary and a full study including a more detailed description of the methodologies used and more detailed results so that the Council is able to assess the scientific relevance of the analysis.

The report will first include a brief description of the ONF and its missions and will explain how environmental objectives are included in these missions. The annual public reporting on State expenditure and the ONF's annual reports will provide all the necessary details, and the French administration in charge of the budget will also be able to provide information if needed.

¹ The Natura 2000 sites, which are essential components of Europe's biodiversity conservation policy, aim to better take into account biodiversity issues in human activities. The network includes 27,522 sites and covers 18% of Europe's land area and 6% of its exclusive economic zone. As at 1 March 2017, there were 1,766 sites in France, covering nearly 13% of the mainland's land area and 11% of its exclusive economic zone. These sites are designated to protect habitats and species deemed to be endangered, vulnerable, rare or endemic or to present outstanding examples of typical characteristics of one or more of Europe's nine biogeographical regions.

The report will assess the effectiveness of the expenditure with respect to three environmental objectives, as presented in the 2017 allocation and output report of the Green OAT: climate change mitigation, climate change adaptation and biodiversity protection. Separate evaluations of each objective will be presented as subsections of the report.

The report will contain a description of a specific counterfactual scenario for the subsidies and an explanation of why it was chosen. In the absence of a better alternative, the counterfactual could be one in which management practices most closely resemble observed private forestry practices at the national level for the ONF.

3. Sub-report on climate change mitigation

This sub-report will focus on aspects of forest management such as CO₂ sequestration and forest resilience to climate change.

Possible evaluation criteria:

- Overall change in *in situ* sequestration due to management practices
- Avoided emissions related to the use of wood products

4. Sub-report on climate change adaptation

Possible evaluation criteria:

- Share of revenues of the forest industry exposed to climate risk
- Managed forest areas contributing to local climate regulation in urban areas
- Managed forest areas contributing to the mitigation of natural hazards in mountain areas (qualitative)
- Managed forest areas contributing to the mitigation of coastal erosion (qualitative)
- Effects of management practices on water availability during dry weather flows (qualitative)
- Effects of management practices on fire risks (qualitative)
- Reduced vulnerability of carbon stocks to climate change and associated risks (qualitative)

5. Sub-report on biodiversity protection

The methodology could be defined by building on the experience of the *Voies navigables de France* (French Waterways Office) study,² on the indicators for the sustainable management of France's forests (IGD 2015) and on the forest indicators used by the *Observatoire national de la biodiversité* (France's national biodiversity observatory) and by considering the forestry chapter of the EFESE³ report.

Possible evaluation criteria:

- Recent changes in the conservation status of species and habitats of community interest in managed areas
- Recent changes to biodiversity in protected forest areas
- Recent changes to biodiversity in certified forests
- Recent variations in the abundance of common birds in managed areas

6. Referees

Two referees will closely monitor the evaluation process and guarantee the independence of the evaluation process. They will be chosen based on their knowledge of one of the fields of study.

² See <https://www.aft.gouv.fr/en/green-oat>.

³ France-wide evaluation of ecosystems and ecosystem services (*Évaluation française des écosystèmes et des services écosystémiques*).

The referees will: (i) on the basis of the terms of reference, provide insights and recommendations to the institution in charge of the evaluation; (ii) receive documentation from the institution in charge of the evaluation during the early stages and provide guidance throughout the whole process; (iii) provide the Evaluation Council with a summary of the exchanges that take place with the institution in charge of the evaluation and their opinion on the final version of the evaluation report. The Secretariat will provide technical support throughout the entire process.