Terms of reference for the impact assessment of ADEME expenditure for the "Investments for the Future" (PIA) programme

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 had committed to providing a thorough ex-post environmental impact evaluation of green eligible expenditure under the guidance of the Green OAT Evaluation Council.

The "Investments for the Future" programmes (PIAs) were set up by the French State to fund innovative investments with strong growth potential, based on a joint funding per project principle. The PIA provide funding for i) structuring research universities, ii) setting up entities to capitalise on research, and iii) funding collaborative, industrial projects in areas such as the digital economy, green biotechnology and chemistry, and marine technologies. An amount of €57 billion has been invested since 2010.

The Secretariat General for Investment in France (SGPI, *Secrétariat general pour l'investissement*) is responsible for overall management. Twelve operators (National Research Agency or ANR, French Agency for Ecological Transition or ADEME, *Caisse des Dépôts et Consignations*, etc.) are responsible for managing national calls for proposals. The operators award selected beneficiaries grants or repayable advances (intervention expenditure), or acquire equity interests (investment expenditure).

Upon the request of the Green OAT Evaluation Council, the impact of various green eligible expenditures in the "Investments for the Future" programmes (PIA1 & PIA2) will be assessed. As a first step, two programmes operated by the French Agency for Ecological Transition (ADEME) will be analysed:

- the "Innovative pilot projects for the energy transition" initiative, or "Energy Transition Demonstrators". This includes renewable energies, energy storage, eco-efficient building and industrial process, smart grids and circular economy projects under the PIA, which aim to promote efficient and competitive industrial sectors in the field of energy and ecological transition, by financing research, development, innovation and industrialisation projects. They take the form of calls for projects managed by the ADEME. At the end of 2018, there were 440 active projects;

- the "Vehicles of the future" initiative, managed by ADEME. This supports technical and technological innovations, as well as innovations of use in the field of carpooling or digital applications of information, itineraries. It supports technological solutions for the improvement of transport performance, the dissemination of new and new information technology uses, digital tools and digitisation of production processes, the deployment of new transport concepts adapted to urban mobility and innovative mobility systems and services, the energy efficiency of transport systems, and the development of technological blocks necessary for the connection and automation of road, rail and maritime vehicles. At the end of 2018, there were 307 active projects.

2. Purpose and content of the report

The study will examine the environmental impact of the 'Innovative pilot projects for the energy transition' and the 'Vehicles of the future' initiatives. For both expenditures, the ex-post environmental impact evaluation will focus on:

--'Innovative pilot projects for the energy transition': climate change mitigation and adaptation, pollution prevention and control, and protection of biodiversity;

--'Vehicles of the future': climate change mitigation, and pollution prevention and control.

The study will provide a quantitative assessment whenever possible, and qualitative information otherwise. When a quantitative assessment is performed, the related uncertainty should be indicated whenever possible.

Regarding the scope of the assessment, all projects that have received funding allocated via the Green OAT since 2016 will be included in the study, although data may not be available for all projects.

3. Methodology

The study will be conducted by an external impact evaluation team, which will be recruited through a public tender.

Existing or ongoing studies may constitute an important data source. Indeed, ADEME and the Secretariat General for Investment are currently conducting a global ex-post impact evaluation of the ADEME-operated PIA. In this regard, an online survey was submitted to entities that have received funds from PIA initiatives until mid-2019: this survey contains a specific portion on ex-post environmental impacts. It requests both quantitative and qualitative indicators, notably on climate change mitigation (avoided emissions in $kgCO_2$/year) and pollution prevention and control (avoided particles of pollutants per year). This online survey could serve as a basis to measure the ex-post environmental impact of expenditure for projects that have been funded by expenditure eligible for Green OAT financing (262 projects). If required, and depending on the survey's overall response rate and representativeness, a complementary online survey could be sent out to collect further quantitative or qualitative indicators on the impact on climate change mitigation and pollution prevention and control.

The evaluation will be performed through the year 2020, and a final report will be delivered by mid-October 2020.

4. 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.

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 at the earlier stages and provide guidance during the whole process; iii) provide the Evaluation Council with a summary of the communication that has taken place with the institution in charge of the evaluation, as well as their opinion on the final version of the evaluation report. The Secretariat will provide technical support right throughout the process.