

Annex 3 — France country case study

BLOSSOM: Support to analysis for long-term governance and institutional arrangements



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The opinions and conclusions presented here are the sole responsibility of the consultants and do not necessarily reflect those of EEA.

Acronyms

BLOSSOM	B ridging L ong-term S cenarios and S trategic analysis — O rganisation and M ethods
EEA	European Environment Agency
EU	European Union
FSM	Foresight Study Mission
CSA	Centre of Strategic Analysis
MEESDTP	Ministry of Ecology, Energy, Sustainable Development and Territorial Planning

1 Introduction

1.1 Introduction

This report sets out the current status of the main institutional and governance arrangements for futures thinking in France with respect to environmental — and environment-related — policymaking. It is an update to the case study report completed under the previous Blossom project in October 2009, and is based on a review of changes in documentation and other available resources, and a set of interviews with high-level officials and experts in relevant government departments, agencies and institutions. The aim has been to understand how futures thinking is undertaken in France, the relationships between different futures programmes, and how these relate to and influence environmental policymaking. The report particularly tries to identify the success factors in ensuring futures thinking is embedded in environmental policymaking; however, barriers to success are also identified. It does not seek to explore the whole range of futures work, only those aspects of most relevance to environmental policymaking, and is focused on the institutional and governance

structures, not the details of the futures studies or the quality of those studies. Further details can be found in the annexes.

In 2009, the previous version of this report, along with similar reports for seven other EU Member States, formed the basis for further cross-country analysis to identify common themes and issues in institutional and governance arrangements, as well as distinctive aspects of different cultural and administrative traditions and approaches to futures thinking. This updated report has been used to inform a revised cross-country analysis, which has also drawn upon new case studies in four additional countries: Germany, Hungary, Austria and Portugal.

This study presents the results of an attempt to synthesise and evaluate current practices: it is meant to shed light on important developments and stimulate discussion but it is not meant to be understood as a comprehensive and concluding assessment of futures-oriented studies or their impacts on decision-making.

2 The landscape for long-term thinking and governance in France

2.1 Background

France has more than half a century of experience in foresight studies. INSEE (the National Institute of Statistics and Economic Studies) was created in 1946 with the aim of producing statistics on past and current situations, but also for prospective studies. The General Commissariat of Planning (*le Commissariat général du Plan*) established by de Gaulle in 1946 and affiliated to the Prime Minister's Offices was responsible for shaping national economic planning. For many years, this institution was the main body preparing foresight studies in the central government, often with a strong economic focus. The Commissariat was replaced in 2006 by the Centre of Strategic Analysis (CSA) (*Centre d'analyse stratégique*). It was considered by Dominique de Villepin (then Prime Minister) that the Commissariat's founding logic of economic planning was no longer appropriate, in particular in the context of an open economy and a complex society.

In addition to government activities, there is a strong academic tradition for foresight and futures-oriented studies in France. In 1957, the philosopher Gaston Berger created the International Centre of Foresight Studies (*le Centre international de prospective*) where foresight studies were based on interdisciplinary work of sociologists, philosophers, diplomats, lawyers, mathematicians, physicians, and other experts. Gaston Berger is considered as the father of the French school of foresight studies, which is characterised by some scholars as having a more humanist and less technocratic approach than other schools ⁽¹⁾.

The French Ministry of Environment (*le Ministère de l'environnement*) was created in 1971, and since the

early 1990s, the Ministry has had an office in charge of foresight studies (Section 2.2.1 provides a history of the offices previously holding this role). The Ministries of Agriculture, Planning and Transport also established departments of foresight studies in the early 1990s — indeed, this period was a turning point in the establishment of foresight studies in the French Ministries.

In 2009, the French Senate created a Delegation on Future Perspectives, inspired by the Finnish Parliament's Committee for the Future.

Perlitz and Seger ⁽²⁾ underline that French organisations consist of clearly differentiated levels in which members of a given level have a clear understanding of their appropriate hierarchical rights and duties. This results in a rather bureaucratic government where the decision-making process is very centralised. Indeed, France can be characterised as a centralised unitary state, where the president of the republic, the government and the parliament hold all the state competences, the president of the republic having a strong control over the policies of the French Government. The competences of all other public legal entities (regions, departments, municipalities, local authorities and public bodies) are established by laws and decrees adopted by the central power. The public institutions that deal with foresight studies are located in the central government, close to the decision-making process such as the CSA, linked to the Prime Minister's Office or the Foresight Study Mission FSM, which is located within the General Commissariat of Sustainable Development (*Commissariat général au développement durable*), whose objective is to promote sustainable development in all public policies, as explained in the next section.

⁽¹⁾ Durance, P., 'Les fondements de l'Ecole française de prospective en question', une introduction au séminaire 'Élément pour une histoire de la prospective', 19 October 2008.

⁽²⁾ Perlitz, M. and Seger, F., 'European cultures and management styles', *International Journal of Asian Management*, 2004.

2.2 Responsibilities: government institutions involved in environmental foresight studies

Currently, the two main governmental institutions promoting and carrying out environmental foresight studies in the French Government are:

- the Foresight Studies Mission (FSM) within the Ministry of Ecology, Energy, Sustainable Development and Territorial Planning (MEESDTP);
- the CSA affiliated to the Prime Minister under the control of the State Secretary for Foresight Studies and the Development of E-economy (*Secrétaire d'Etat chargée de la prospective et du développement de l'économie numérique*).

While France has a fairly strong tradition in carrying out environmental foresight studies, both of these offices have been recently created/restructured.

2.2.1 A brief history

In 1992, the Ministry of Environment and the Ministry of Infrastructure (*Ministère de l'équipement*) created a joint Centre for Monitoring and Foresight Studies (*Centre de veille et de prospective*)⁽³⁾. In 1997, however, this joint centre was wound up and the Ministry of the Environment established its own Unit of Foresight Studies (*la Cellule de prospective*)⁽⁴⁾. This unit published several foresight studies on agriculture, transport and waste until 2000, when the Department of Research and Foresight Studies (*le Département de la recherche et de la prospective*) within the Unit of Economic Studies and Assessment of the Environment became responsible for environmental foresight studies. In 2007, the Ministry of Environment was integrated into the new Ministry of Ecology, Energy, Sustainable Development and Territorial Planning (MEESDTP) (*Ministère de l'écologie, de l'énergie, du développement durable et de l'aménagement du territoire*), and in November 2008, the Department of Research and Foresight Studies was replaced by the Foresight Studies Mission (FSM) (*la Mission prospective*) which also incorporated the department of foresight studies of the former Ministry of Infrastructure.

2.2.2 The Foresight Studies Mission

Today, the FSM is located within the Ministry's Delegation of Sustainable Development (*Délégation au développement durable*), which is the department of the General Commissariat of Sustainable Development (*Commissariat général au développement durable*) in charge of the strategic choices of the MEESDTP on priorities and cross-cutting issues relating to sustainable development (Figure 1). The Delegation is also responsible for monitoring the implementation of the *Grenelle de l'environnement* (Section 2.4), as well as a mission to promote the integration of sustainable development in the policies of the other ministries.

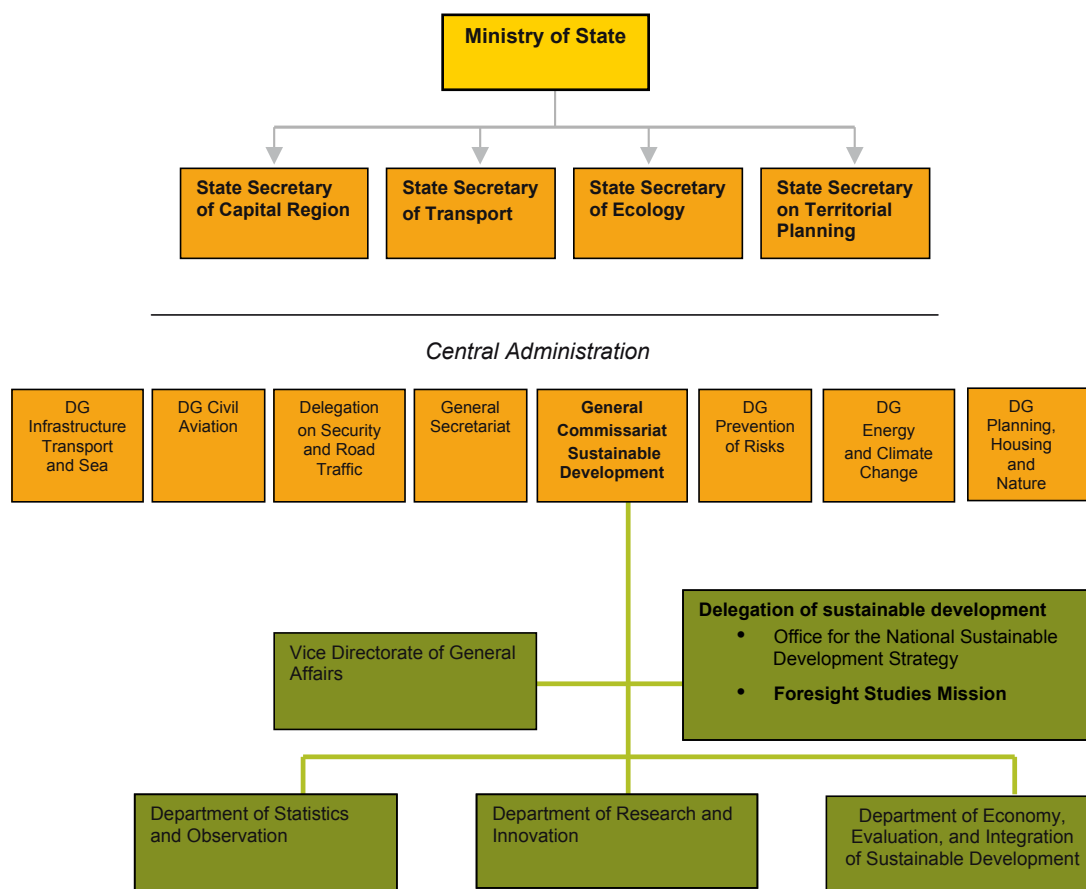
The FSM has three main areas of competence.

1. The FSM coordinates foresight study activities within the MEESDTP. The FSM facilitates all initiatives related to foresight studies undertaken at the different hierarchical levels within the MEESDTP: it is a centre of resources, a focal point, where all the services of the MEESDTP can ask for advice and information on foresight studies. Within the MEESDTP, the FSM promotes cooperation between the different departments on the elaboration of cross-cutting projects related to foresight studies. At the same time, the FSM and the Commissariat do not have any higher authority than other departments in the MEESDTP, which is quite a large Ministry. (Information on the FSM's role in practice was not available and may not yet be clearly established.) Outside the Ministry, the FSM participates in the main government foresight studies networks at both national and European levels. One of the goals of the FSM is to reinforce existing cooperation initiatives (e.g. with the Centre for Strategic Analysis).
2. The FSM oversees the development of foresight studies or produces its own foresight studies on long-term transitions (i.e. with a time frame of 2020 or 2030). The FSM has identified five main areas of research in accordance with the main priorities of the MEESDTP:

⁽³⁾ Headed by Jacques Theys at time of studies.

⁽⁴⁾ Directed by Dominique Dron at time of studies.

Figure 1 The FSM within the ministry structure, November 2010



- the post-carbon city;
 - transition toward an ecological economy;
 - the transformation of French territories in 2030;
 - the reconfiguration of the national research systems in the area of sustainable development
 - the change of multilevel governance in the geopolitical context of the next 20 years.
3. The FSM is also responsible for the communication and dissemination of foresight studies to all stakeholders likely to use the results: agencies affiliated to the MEESDTP, local and territorial agencies, communities and managers of natural areas, manufacturers concerned with the environment and sustainable development, and the associative sector. It organises debates on foresight studies. Finally, the FSM's role is to alert the decision-makers about new environmental issues identified by foresight studies.

2.2.3 The Centre of Strategic Analysis

In 2006, the Centre of Strategic Analysis (CSA) replaced the General Commissariat of Planning (*le Commissariat général du Plan*). This is an advisory body under the direct responsibility of the prime minister and is responsible for providing scientific monitoring and expertise. It prepares reports, recommendations and opinions at the prime minister's request and on its own initiative in order to advise the government on the establishment and implementation of overall strategy in relation to economic, social environmental or cultural issues. In its activities, the CSA takes into account long-term objectives defined at the European Community level, such as those defined by the Lisbon Strategy.

The CSA also has a mission to facilitate the integration of EU policies within the French Government's policies. In collaboration with the

General Secretariat of European Affairs, it plays an interface role between the national and EU levels.

The secretary of state in charge of foresight studies and the development of E-economy (*Secrétaire d'Etat chargée de la prospective et du développement de l'économie numérique*) within the Prime Minister's Office was established in 2007. This secretary of state is expected to control and direct the foresight studies activities of the CSA.

The Centre of Strategic Analysis encompasses five thematic departments for:

- economic and financial affairs
- employment and formation
- society and institutions
- social affairs
- research, technology and sustainable development.

The Department of Research, Technology and Sustainable Development is expected to lead all work on foresight studies relating to the environment, as it is in charge of sustainable development issues (Figure 2). For example, this department prepared the scenarios on the environment and scarce resources in the *France 2025* foresight study, reassessed in 2009 (Box 1).

Box 1

France 2025 is a strategic assessment project, which aims to identify possible future development scenarios for the country and to recommend winning strategies.

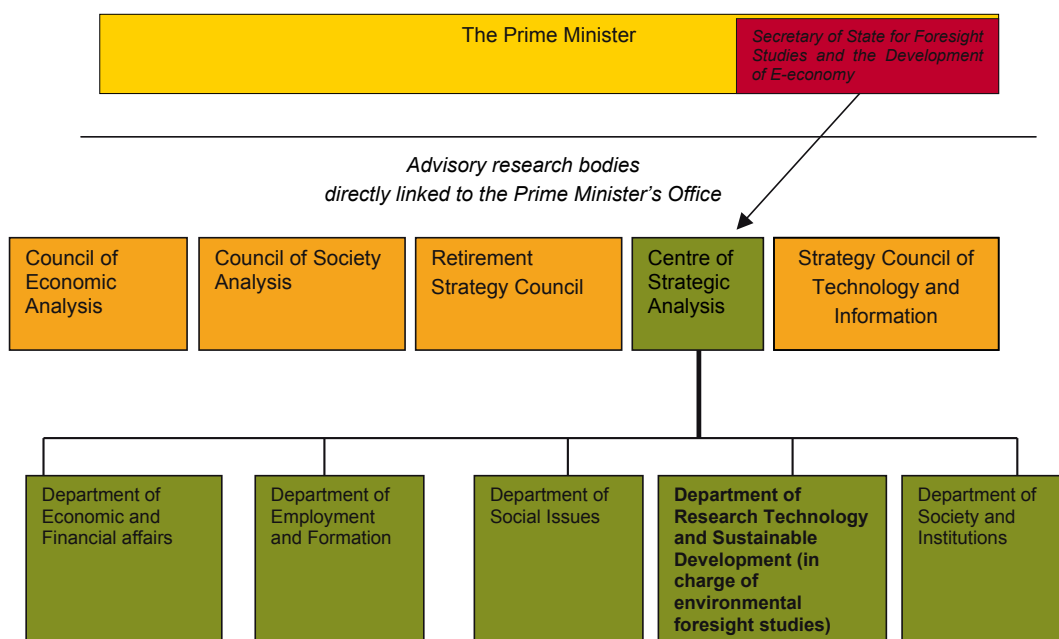
Eight different groups participated in the production of France 2025. The group on scarce resources and environment, led by CSA, focused on the following issues:

- energy and climate change;
- raw mineral material economics;
- French agriculture (how to produce and respect the environment);
- biodiversity threatened by economic development.

Since its creation, the CSA has produced several foresight studies relating to sustainable development issues, including the following:

- *The vehicle for all in 2030* (April 2009);
- *The state-imposed value of carbon in 2050* (June 2008);
- *French energy perspectives 2020–2050* (April 2007).

Figure 2 Location of the department dedicated to environmental foresight studies within the Prime Minister's Office, November 2010



According to its 2010 work programme, the Department of Research, Technology and Sustainable Development of the CSA, is planning a foresight study related to the issue of sustainable consumption, with a time frame to 2030–2050. The study will look across the board at different areas of consumption, including energy issues such as household heating and transport ⁽⁵⁾.

This department is also currently working (in 2010) on a broad range of climate change issues following the Copenhagen Conference, including questions related to freight transport.

As part of the budgetary framework of the 'Coordination of government work' programme, the CSA is responsible for the 'Strategy and the long-term initiative'. Several other public research bodies, including several under the Prime Minister's Office, participate in this initiative and carry out foresight studies.

- The Centre of Foresight Studies and International Information (*Centre d'études prospectives et d'informations internationales*).
- This Centre on international economics produces studies, researches, databases and analyses on the world economy and its evolution. Founded in 1978, it is affiliated to the CSA.
- The Council of Employment, Salary, Social Cohesion (*Conseil de l'emploi, des revenus et de la cohésion sociale*). Created by the Conseil d'Etat decree of 7 April 2000, the CERC has charge of the study of income, social inequalities and the relationship between employment, income and social integration. From time to time, it issues summary report and reports on specific issues relative to matters within its area of interest. These reports are sent to the prime minister and the presidents of the National Assembly, Senate and Economic and Social Council. They are published by the Council.
- The Council for Employment Strategy (*Conseil d'orientation pour l'emploi*). Created by the decree of 7 April 2005 by the authority of the prime minister, it is a permanent advisory and consultation structure focusing on employment issues. It consists of 50 members (trade unions, MPs, representatives from the state and local authorities as well as qualified individuals).
- The Council of Economic Analysis (*Conseil d'analyse économique*). Created on 24 July 1997 by the authority of the prime minister, its purpose

is to inform, through debate and analyses, the decisions of the government on economic issues; it examines matters submitted by the prime minister.

- The Council of Retirement Strategy (*Conseil d'orientation des retraites*). Created by the decree of 10 May 2000 by the authority of the prime minister, the aim of this Council is to describe the medium and long-term development and prospects of pension plans and draw up projections of their financial positions, to assess the conditions required to ensure their long-term financial validity, consider their funding to follow-up the development of this funding, to participate in the information process on pension systems and to monitor all pension plan indicators.
- The Council of Society Analysis (*Conseil d'analyse de la société*). The objective of this Council, instituted by the decree of 9 July 2004, is to assist the government in making decisions on major social issues. It consists of 28 members, academics, research workers, artists and sports personalities.

2.3 Resources, staffing involved

For the CSA, as well as the consultative bodies it oversees, staff funding is EUR 14.15 million, while administrative funding adds an additional EUR 10.3 million. The upper staffing limit for the 'Strategy and the long-term initiative' for 2008 has been set at the equivalent of 215 full-time positions. The CSA workforce consists of 175 full-time employees.

The Foresight Study Mission within the MEESDTP has a budget for 2009 of EUR 600 000. It employs six professional-level officials full-time. Table 1 summarises the situation.

2.4 Stakeholders and external relationship

2.4.1 Consultation

Consultation of stakeholders (and to some extent, the public at large) has long been an element in the preparation of foresight studies in France. However, consultation was in some way institutionalised by a major event at the start of the Sarkozy Presidency, the *Grenelle de l'environnement* ⁽⁶⁾. This 'summit', launched in 2007, was intended as a contract

⁽⁵⁾ This work programme is available online (<http://www.strategie.gouv.fr/IMG/pdf/ProgCAS-2010-recherche.pdf>).

⁽⁶⁾ The expression Grenelle de l'environnement refers to the Grenelle agreements negotiated during the May 1968 crisis by representatives of labour unions, employer organisations and the French Government.

Table 1 Resource allocation for institutions on environmental foresight studies

Institution	Established	Resources
CSA	Since 2006 (replaced the <i>Commissariat general au plan</i> , created in 1946)	Total budget: over EUR 24 million in 2009; only a small part of this is allocated to foresight studies related to the environment
FSM	Since November 2008	Budget: EUR 600 000 Staff: six full-time professional officials

between the central state, territorial entities, labour unions, the private sector and the civil society (environmental NGOs) on the environment. The negotiations led to a series of new laws implementing new initiatives for the environment.

During this consultation process, six working groups were constituted (climate change and energy, biodiversity, health and environment, sustainable consumption, environmental democracy, employment and green growth). In these groups of around 40 persons each, the state, local authorities, NGOs, employer organisations, labour unions were all represented. Each group was led by an independent expert whose expertise was recognised by all stakeholders (typically, a figure from the academic world). After the meeting itself, an Internet forum was used to consult the public at large on the points discussed by the groups. Local authorities were also consulted on the measures proposed by the groups, through the creation of interregional meetings.

The Grenelle institutionalised what has become a 'rule of five' for government consultation: the state, local authorities, NGOs, employer organisations, labour unions. These five parties are consulted more and more in the elaboration of foresight studies, for example at the CSA. Indeed, the internal objectives and guidelines of the CSA (7) mentioned that it shall gather knowledge likely to be subject to exchanges with academics, civil society and representative partners (employer organisations, labour unions). For example, eight working groups composed of representatives from labour unions, employer organisations, NGOs, state officials, recognised experts in their area of competence, worked on the eight main subjects of the foresight study France 2025 which also covered the environment (management of scarce resources). A dedicated website was launched to collect the comments of the public for the elaboration of this study (8).

The FSM also uses the Grenelle consultative approach for its foresight studies. One of the plans of the FSM for the 2009/2010 year is to put in place a semi-permanent consultative body composed of experts from the private sector, academics and civil society, both from France and from other countries. This body, to be called a 'think tank', will collaborate on the FSM's strategy. It will provide advice, recommendations on the preparation of foresight studies. This process is expected to bring new perspectives, new issues and greater creativity to the production of foresight studies inside the Ministry. In addition, it is hoped that this will introduce, among the goals of the foresight studies, debates in the public sphere. Finally, this group will guarantee the independence of the foresight studies produced by the ministry.

2.4.2 Communication

For both the FSM and the CSA, the communication of foresight studies is considered a priority activity.

A high official at the FSM said that the office seeks to improve the diffusion of foresight studies to the public at large. He noted that the dissemination of foresight studies should be improved as it is necessary that people have a long-term vision of the future in order to raise their awareness about the importance of the implementation of sustainable development policies.

To that end, the FSM will publish all its work on foresight studies and will specifically seek to promote its most important studies.

The General Commissariat of Sustainable Development (*le Commissariat général au développement durable*) publishes five bulletins per year. A significant part of each eight-page bulletin will be dedicated to the work of the FSM. All the foresight studies produced by the FSM will be

(7) Le Centre d'analyse stratégique, S'organiser pour un nouveau projet (<http://www.strategie.gouv.fr/IMG/pdf/Projetdeservice.pdf>).

(8) <http://www.france2025.fr/xwiki/bin/view/PresentationProjet/Aide>.

published, along with executive summaries more accessible to the general public. The FSM is also planning its own website in order to make available to the public specific information on its activities.

Since its establishment in November 2008, the FSM has published two issues of its review *Horizons 2030–2050*, one on perspectives for the green economy and the other on the prospects for post-carbon cities ⁽⁹⁾.

All the work of the CSA is open to the public, in written form or through seminars and workshops. The CSA publishes the following documents and reports.

- The annual report is a synthesis of the work done by the CSA through the year. Its aim is to report on the activities of the CSA (accountability) and it to enable exchanges between the CSA, civil society and external experts.
- Quarterly review: the aim of the quarterly review is to publish the results of studies and work conducted within the CSA. The aim of the review is to promote academic and public debate and the publication of their work in the academic sphere. It is addressed to the academic world and policy research institutions.
- Working documents: these documents provide information on the ongoing and intermediary studies of the CSA. They are from 15 to 40 pages long. These documents, which are more technical, are addressed primarily to the experts concerned.
- Thematic reports: the thematic reports focus on cross-cutting issues identified by and studied at the request of the prime minister.
- Seminar proceedings: all conferences, seminars, workshops produced by the CSA are summarised and published on the website of the CSA.

Thus, both the CSA and the FSM have established a real communication strategy for their foresight studies in order to diffuse them to the public at

large, the experts concerned and policymakers. Even though foresight studies are mainly technocratic tools used by the French Government, they are also considered both by the CSA and the FSM as a medium to raise public awareness on future environmental issues and to enhance the dialogue between civil society and the French Government: the Stern report is seen as a successful foresight study in terms of communication by some of the officials interviewed, who want to duplicate its success in relation to ongoing foresight work.

2.5 The Senate's foresight role

In late 2009, the French Parliament ⁽¹⁰⁾ — specifically the Senate — added future issues to its role: the Senate established a Delegation on Future Perspectives (*Délégation à la Prospective*) in October 2009, and foresight is now considered as this body's third mission, together with law-making and the oversight of government activities ⁽¹¹⁾. In creating the Delegation for Future Perspectives, the French Senate was inspired by the Committee for the Future of the Finnish Parliament.

The managing committee of the Senate ⁽¹²⁾ (*le bureau du Sénat*) has charged the Delegation on Future Perspectives, the first parliamentary institution in France in this field, to look at changes in society and the economy in the coming decades. The Delegation thus covers a broad range of topics. It is composed of 36 senators representing proportionally the political groups within the French Senate, and it can publish reports, issue proposals and request the holding of Senate debates. It is also charged with maintaining contacts with institutions for forward-looking studies in France and in other countries.

Since its creation, the Delegation has been involved in two foresight studies, one on future cities (*les villes futures*) ⁽¹³⁾ and the other on the French economy and public finances toward 2030 ⁽¹⁴⁾.

⁽⁹⁾ These publications are available online (<http://www.developpement-durable.gouv.fr/Horizons-2030-2050,13270.html>).

⁽¹⁰⁾ The French Parliament is divided in two chambers: the National Assembly (*l'Assemblée nationale*) and the French Senate (*le Sénat*). Unlike the National Assembly, whose members are directly elected, senators are chosen indirectly by electoral colleges composed of municipal councillors in each district region (*département*). It thus represents local bodies (counties, districts and regions). Together with the French Assembly, the Senate votes on laws proposed by the government or by parliamentary initiatives. The Senate also votes on amendments to the Constitution and provides oversight of government activities.

⁽¹¹⁾ Senate press release, 13 January 2010 (<http://www.senat.fr/presse/cp20100113.html>).

⁽¹²⁾ This committee is a body of 25 senators who take all major decisions involving the workings of the Senate chaired by the Speaker (*le président du Sénat*) who is the national representative of the French Upper house and presides over its debates.

⁽¹³⁾ <http://www.senat.fr/rap/r09-510/r09-5101.pdf>

⁽¹⁴⁾ <http://www.senat.fr/rap/r09-335/r09-3351.pdf>

While the French Parliament has taken on this major new role, it does not have a committee that specifically reviews the work of the CSA (or the FSM), along the lines, for example, in the United Kingdom.

2.6 Relative balance between quantitative and qualitative approaches

The foresight studies relating to transport or energy issues are likely to be based on complex modelling and thus are more quantitative than qualitative. Normally, the CSA, since it is known to have an

engineering background, is more likely to produce quantitative foresight studies based on modelling, while the studies developed by the FSM follow generally a qualitative approach (Agora, 2020; Fret, 2030).

Furthermore, the Commissioner-General for Sustainable Development in the MEESDTP would like the FSM to focus on qualitative studies with the aim to guide policymakers toward specific goals. According to the Commissioner-General, the role of foresight studies is to support policymakers on their decisions and to bring new environmental issues on the agenda.

3 Analysis

3.1 The relationship between futures programmes

The two main government bodies working on environmental foresight studies, the CSA and the FSM, cooperate but do not have a hierarchical relationship.

Across the French Government, a new coordination mechanism has been established for futures programmes. An informal inter-ministerial committee of foresight studies has been put in place where all the departments of foresight studies of the different ministries meet every month at the CSA and work together, creating a platform for the exchange of information and recommendations. The CSA coordinates this informal inter-ministerial committee through its department of inter-ministerial ministerial network (*Réseau interministériel de veille*), under the Direction of Nathalie Bassaler. In addition, the CSA and the FSM are planning to develop a common website in English and French on their work on foresight studies.

Some officials stressed that there might be some overlap of competences between the work of the CSA and the FSM since the subjects addressed in their foresight studies are very close to each other. This feeling has been enhanced since the new Secretary of State for Foresight Studies and the Development of E-economy is a former Secretary of State for Ecology ⁽¹⁵⁾ and, thus, more likely to focus foresight studies on sustainable development issues. It is argued that this overlap is also due to the fact that the CSA has a mission of general interest (*intérêt général*) and that sustainable development has progressively become a main question of general interest.

On the other hand, the positive aspect of this overlap of competences is that it creates a plurality of visions and that it establishes a strong pole of environmental foresight studies in the French

Government. It is worth noting that foresight studies produced by the CSA are more likely to focus on the short and medium-term future, as they are more linked to the decision-making process, while the FSM foresight studies are likely to be studies on a longer term.

3.2 Impact on environmental policymaking

There have been two distinct periods in the development of foresight studies in the French Government.

Until the end of the 1990s, the role of environmental foresight studies in the French Government was to bring new environmental issues to the agenda. Most of the foresight studies were explorative and were not directly connected to the decision-making process. For example, in 1996, the Centre of foresight studies and scientific monitoring of the Ministry of Environment organised a conference at Fontevraud with 300 participants. Its aim was to identify the main trends of the evolution of the environment. The main concern of the organisers was to raise awareness about future transformations of the environment. The results of this conference were published in a foresight study that was very explorative but was not effectively connected to the decision-making process. At this time, there was no real department or structure dedicated to environmental foresight studies, although individuals within the former Ministry of Environment could initiate the production of environmental foresight studies and their diffusion to the policymakers. Consequently, however, their impact on environmental policymaking was indirect and uncertain.

Since then, foresight studies have been much more integrated in the decision-making process. Indeed, France now has public officials who are exclusively in charge of the production and the diffusion of

⁽¹⁵⁾ Nathalie Kosciusko-Morizet.

environmental foresight studies for policymakers (CSA, FSM). Environmental studies are now considered as technocratic tools that give direction to policymakers. Both the CSA and FSM are situated very close to the decision-making process within the governmental institutional structure: the FSM is under the umbrella of the Commissioner-General for Sustainable Development which is in charge of the strategic choices related to sustainable development policies of the MEESDTP; the CSA is directly affiliated to the prime minister under the control of the new Secretary of State for Foresight Studies and the Development of E-economy.

While the potential for greater impact is an important development, there are concerns that as foresight studies have become technocratic tools in support of the decision-making process, fewer explorative studies are promoted and thus they may play less of a role in identifying new environmental issues and bringing them to the attention of policymakers. Indeed, foresight studies in general are now expected to be useful and directly usable in the decision-making process.

3.2.1 *Impact of CSA foresight studies on environmental policy*

The overall impact of environmental related foresight studies of the CSA on environmental policy is difficult to assess — one reason being the relatively recent creation of this centre.

On a concrete level, the CSA's work provided inputs to the recent multi-stakeholder discussions and negotiations in the *Grenelle de l'environnement*. For example, the prime minister formally requested the CSA in July 2007 to support the Grenelle by producing papers on the following subjects:

- corporate responsibilities vis-à-vis sustainable development issues ;
- the enhancement of innovation in the field of the environment;
- the state-imposed value of carbon;
- the emission trading market of CO₂;
- GMOs;
- Nanotechnologies.

These subjects did not specifically involve the production of environmental foresight studies. At the same time, the prime minister asked that the energy scenarios developed by the Commission on energy, established by the CSA in 2006, be used as a

basis for the relevant working groups of the *Grenelle*. This foresight study is looking at how France, Europe and the world, should act in order to avoid catastrophic energy and climate change scenarios over the period to 2020 and 2050. It thus provides some concrete recommendations to the French Government and to policymakers in general (e.g. to convince France's European partners to commit themselves to very ambitious CO₂ emission targets, and to invest in research in clean technologies). This study has a strong sustainable development component since it addresses environmental issues related to energy (reduction of greenhouse gas emissions, adaptation to climate change, protection of the environment, promotion of renewable energy sources). Moreover, the prime minister has nominated the Rapporteur of this Commission on energy to be the General Rapporteur of the *Grenelle* ⁽¹⁶⁾.

This example shows how foresight studies of the CSA can influence French environmental policymaking. Furthermore, the privileged position of the CSA which is linked to the prime minister might also be a crucial factor for the impact of its environmental foresight studies on the French decision-making process in the coming years.

3.2.2 *Impact of FSM foresight studies on environmental law policies*

The FSM is a very new structure, created in October 2008. It has not produced or supervised the production of any foresight studies yet, and thus it is not possible to assess the impact of its environmental foresight studies on environmental policymaking. However, as mentioned above the FSM is planning to produce or to finance five main foresight studies on the following topics:

- the city post-carbon;
- transition toward an ecologic economy;
- the transformation of the French territories in 2030;
- the reconfiguration of the national research systems in the area of sustainable development;
- the mutation of multilevel governance in the geopolitical context of the next 20 years.

The FSM's goal is to propose, within two years, concrete and specific actions from the result of these foresight studies.

⁽¹⁶⁾ Thierry Tuot.

The aims of the FSM are to diffuse these foresight studies to the public at large both nationally and internationally and to provide policymakers (at local, national, international levels) with recommendations to be used in the decision-making process. It is also worth noting that the FSM is currently establishing an internal network with the various departments of the MEESDTP, with one or two meetings per year in order to be closer to the decision-making process of the MEESDTP.

Furthermore, the Commissioner-General for Sustainable Development is very willing to use environmental foresight studies as a tool to implement public policies. Finally, the FSM is located in a very strategic department and it is at the centre of the decision-making process on sustainable development issues. Thus, environmental foresight studies produced by the FSM might have more and more impact on French environmental policymaking.

4 Conclusion

4.1 Success factors

In assessing the success factors as well as barriers to success, it should be underlined that the current French Government has introduced major changes in terms of the priority for environment and sustainable development policies as well as the use of futures-oriented studies to support policy. Thus, some initial considerations can be made — but the changes are too new to draw definitive lessons.

The government's stronger emphasis on environment and sustainable development is a factor in success. This new priority is seen in the support for the *Grenelle de l'environnement* process that started in 2007, as well as the creation of a new 'super-ministry' that covers ecology, energy, sustainable development and territorial planning.

In addition, the French Government now sees futures-oriented studies as an important input to policymaking.

Foresight studies departments (CSA, FSM) are now very well integrated into the decision-making process (close to the Prime Minister and the Commissioner-General for Sustainable Development) and one of their main goals is to support and advice policymakers in their strategic choices. Some officials argue that such close relationships to the decision-makers are not always recommended, this argument is developed in the next section.

This is a change in emphasis in the area of environment, where such studies previously had the role mainly of identifying and exploring upcoming issues for the policy agenda. An example of the old approach can be seen in the foresight study 'Agriculture, environment, and territories: Four scenarios toward 2025' (2006), which had the objective of developing several pictures of the impact on the environment of future agriculture production, depending on the possible evolution of the agricultural sector in France and Europe. This foresight study did not include recommendations to policymakers as it was only exploratory.

At the same time, France has a tradition of preparing foresight studies: the earliest plans, linked to post-war economic planning, were prepared more than half a century ago. The Ministry of the Environment has had a unit for foresight since the early 1990s. Thus, the government has strong experience in terms of different methods and approaches.

In the new system, a high level of coordination is foreseen between government offices working on foresight, through an informal, inter-ministerial committee.

Another important factor is the growing emphasis on consultation with key stakeholders, building on the approach used for the *Grenelle de l'environnement*.

Furthermore, these departments aim to diffuse their foresight studies to the public at large, the actors concerned and the policymakers, and have put in place a robust communication strategy in order to reach as many people as possible. This includes the establishment of a website, several publications, conferences, creation of networks and international openness.

The French Senate's creation of a Delegation on Future Perspectives is a new development (established October 2009) and it is too early to draw any conclusions concerning its work. The new delegation, nonetheless, should raise the profile of forward-looking studies as well as their impact on policy in France.

4.2 Barriers to success

The French Government's new approach will increase the role of foresight work, including for the environment. At the same time, France faces several risks and potential barriers.

One risk is that, in line with the characterisation of French culture by Perlitz and Seger, these new initiatives have been directed by the central government — by the presidency and the Prime

Minister's Office. As such, they could easily be changed or reversed if leaders of their political priorities shift.

One current concern is that, despite the mechanisms for coordination, there might be an overlap of competences between the two main bodies involved in foresight studies related to the environment, the CSA and the FSM.

A further risk lies in the shift in the aim of foresight from exploratory studies to support for decision-making. For example, decision-makers often focus on short-term priorities and thus may not take on board studies with long-term perspectives — though policymakers say they are more and more concerned by sustainable development issues and thus with long-term impacts.

On the other hand, the old approach, especially in environmental studies, had the disadvantage that results were not clearly translated into policy actions (as for the 2006 agriculture study, described in the previous section). Within the Ministry of Environment, organisations that worked on foresight studies before the FSM were somewhat disconnected from the policy process and focused on preparing exploratory studies.

A potential weakness today stems from the fact that foresight offices in France have largely focused

their efforts up until now on preparing exploratory studies. As a result, they have had little experience presenting and disseminating study results to government, stakeholders and the public, thus ensuring a direct impact.

One concern specifically related to the environment is that foresight has so far focused on a few topics, leaving others untouched. Indeed, there have been almost no foresight studies at the national level on waste, biodiversity or water.

Here, and more generally, there is a concern about resources. Some in the French Government argue that foresight studies should only be based on existing information with little new research. This will limit the capacity of the studies to explore new areas and identify upcoming environmental issues.

The close relationship with decision-makers can be considered a success factor but it can also be viewed as a barrier. This strong link might limit the freedom to choose specific environmental topics. Moreover, policymakers are more likely to request studies in the shorter term. It is thus, necessary, as officials interviewed for this review emphasised, to find the right balance between an exploratory approach and decision-making needs. In order to find this right balance, it might, thus, be necessary to specify in the legal statutes of the offices working on foresight studies that they should develop and promote both normative and exploratory foresight studies.

5 References

Information gathered during the interviews of Dominique Auverlot, Jacque Theys and Michèle Pappalardo.

Philippe Durance, 'Les fondements de l'Ecole française de prospective en question', une introduction au séminaire 'Éléments pour une histoire de la prospective', 19 October 2008.

Laurent Mermet, *Étudier des écologies futures — Un chantier ouvert pour les recherches prospectives environnementales*, Ecopolis, 2005.

Perlitz, M. and Seger, F., 'European cultures and management styles', *International Journal of Asian Management*, 2004.

Ministère de l'écologie, du développement durable et de l'aménagement du territoire, dossier de presse (http://www.legrenelleenvironnement.gouv.fr/IMG/pdf/Dossier_de_presse_grenelle.pdf).

Premier Ministre, Centre d'analyse stratégique, S'organiser pour un nouveau projet (<http://www.strategie.gouv.fr/IMG/pdf/Projetdeservice.pdf>).

'Décret no 2006-260 du 6 mars 2006 portant création du Centre d'analyse stratégique' (<http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000818940&dateTexte>).

Information on the French Senate Delegation on Future Perspectives (*Délégation senatorial à la Prospective*) (<http://www.senat.fr/commission/prospective/index.html>).

Appendix 1

Approaches to futures studies

Country: France	
Title of futures programme(s):	Centre of Strategic Analysis (CSA) Foresight Study Mission (FSM)
1. Overall governance culture of country	<p>Description</p> <p>French organisations consist of clearly differentiated levels in which members of a given level have a clear understanding of their appropriate hierarchical rights and duties. This results in a very bureaucratic society where the decision-making process is very centralised.</p> <p>Indeed, France is a centralised unitary state. The president of the republic, the government and the parliament (<i>by voting laws</i>) hold all the state competences. The competences of public legal persons (regions, departments, municipalities, local authorities, and public bodies) are attributed by laws and decrees of the central power.</p> <p>The public institutions that deal with foresight studies are located at governmental level within the central power close to the decision-making process.</p>
	<p>Nature of futures organisation(s)</p> <p>The CSA is an advisory body within the Prime Minister's Office. It is a permanent organisation and included in its role is the production of foresight studies.</p> <p>The FSM is a permanent internal body within the Ministry of Ecology, Energy, Sustainable Development and Territorial Planning. It is completely dedicated to the production and diffusion of foresight studies.</p>
	<p>Date programme(s) introduced</p> <p>The CSA was created in March 2006 by Decree 2006/260.</p> <p>The FSM was established in November 2008.</p>
	<p>Responsibility</p> <p>The creation of the CSA was initiated by Dominique de Villepin who was the prime minister of France in 2006. It is now affiliated to Francois Fillon, the current Prime Minister of France, and under the control of the Secretary of State Secretary for Foresight Studies and the Development of E-economy, Nathalie Kosciusko-Morizet.</p> <p>The FSM is a new structure and part of the new Ministry of Ecology, Energy, Sustainable Development and Territorial Planning. This ministry was established by Nicolas Sarkozy when he came to power in 2007.</p> <p>The FSM is located within the Delegation of Sustainable Development (<i>Délégation au développement durable</i>). This delegation is a service of the General Commissariat of Sustainable Development (<i>Commissariat général au développement durable</i>) in charge of the strategic choices of the MEESDTP on priority and cross-cutting issues relating to sustainable development and of follow-up on the implementation of the <i>Grenelle de l'environnement</i>. The Delegation of Sustainable Development has also the mission to promote the integration of sustainable development in the policies of the other ministries. The Delegation of Sustainable Development is under the control of Catherine Larrieu.</p>

Country: France	
Resources	<p>As part of the budgetary framework of the 'Coordination of government work' programme, the CSA is responsible for the 'Strategy and the long-term initiative'.</p> <p>This initiative brings together the management of funds allocated to it, as well as to several public bodies specialising in research and foresight studies.</p> <p>Staff funding for all of these bodies is EUR 14.150 million while administrative funding amounts to EUR 10.303 million. The upper staffing limit for the 'Strategy and the long-term initiative' for 2008 has been set at the equivalent of 215 full-time positions.</p> <p>The CSA workforce comprises 175 full-time employees (including 45 staff from the agents). The FSM of the Ministry of Ecology, Energy, Sustainable Development and Territorial Planning: the budget allocated to the FSM is EUR 600 000. It has six high officials (<i>fonctionnaire A</i>) employed full-time.</p>
Tradition	<p>There have been frequent reorganisations of institutions dedicated to environmental foresight studies in the French Government.</p> <p>1992–1996: the Centre of Monitoring and Foresight Studies (<i>Centre de veille et de prospective</i>) which was a service common to the Ministry of the Environment and the Ministry of Infrastructure (<i>Ministère de l'équipement</i>)</p> <p>1997–2000: the Unit of Foresight Studies (<i>la cellule de prospective</i>) from the Ministry of Environment.</p> <p>2000 to November 2008: from 2000 to November 2008, the Department of Research and Foresight Studies (<i>le département de la recherche et de la prospective</i>) within the Unit of Economic Studies and Assessment of the Environment. It is worth noting that, in 2007, this service was integrated into the new Ministry of Ecology, Energy, Sustainable Development and Territorial Planning (MEESDTP) (<i>Ministère de l'écologie, du développement durable et de l'aménagement du territoire</i>).</p> <p>November 2008 to present: the Foresight Studies Mission (FSM) (<i>la mission prospective</i>) which also incorporated the department of foresight studies of the former Ministry of Infrastructure.</p> <p>1946–2006: the General Commissariat of Planning (<i>le Commissariat général du Plan</i>) put in place by General de Gaulle and affiliated to the Prime Minister's Office was responsible for shaping and developing the economic planning of the country. This institution was the main author of foresight studies at the central government level.</p> <p>2006 to present: the Council of Strategic Analysis (CSA).</p>
Parliament	<p>The French parliament did not put in place a committee with the aim of reviewing the work of the CSA and the FSM as is, for example, required in the UK system. There is no external scrutiny of the work of these two institutions. There is only an internal control by the Commissioner-General for Sustainable Development (FSM) and the Prime Minister (CSA).</p>
Advisory councils	<p>The FSM is planning to put in place a think tank composed of persons from the private sector, academics and civil society both from France and from other countries. This think tank will collaborate on the strategy of the FSM. It will provide advice and recommendations on the production of foresight studies.</p> <p>The CSA has not established permanent forums for stakeholder deliberation; however, in the objectives of the CSA ¹⁷ it is mentioned that the CSA shall gather knowledge likely to be subject to exchanges with academics, the civil society and the representative partners (employer organisations, labour unions).</p>

⁽¹⁷⁾ Le Centre d'analyse stratégique, *S'organiser pour un nouveau projet* (<http://www.strategie.gouv.fr/IMG/pdf/Projetdeservice.pdf>).

Country: France	
Legal framework	<p>The CSA was established by Decree 2006-260 of March 2006. This decree does not specifically mention that the CSA shall provide long-term analysis. However, it provides that the CSA shall produce reports, recommendations and opinions on the request of the prime minister or from its own initiative in order to advise the government on the definition and the implementation of strategic orientations on economic, social, environmental or cultural matters.</p> <p>There does not seem to be any legal obligation on the FSM to provide long-term analysis.</p>
Political framework	<p>Dominique de Villepin, when prime minister, initiated the creation of the CSA. He asked that, among four other requests, the CSA should guide or advise usefully on the control of scientific and technical risks following a sustainable development approach. This statement implicitly includes the use of foresight studies related to sustainable development issues.</p> <p>Most of the work of the CSA is requested by the prime minister. In 2007, the prime minister requested the CSA to support the <i>Grenelle de l'environnement</i> by offering its expertise during this consultation process. One of the requests of the prime minister was that the result of a foresight study on French energy scenarios produced by the CSA (with a very strong environmental component) should be used as the basis for the <i>Grenelle de l'environnement</i> consultation process.</p> <p>The General Commissariat of Sustainable Development provides in its mission statement that it aims to provide openness by developing scientific monitoring and long-term forecast studies in all forms.</p>
Role of environmental research/ foresight programmes in providing futures thinking	<p>The CSA shall provide scientific monitoring and expertise missions to the prime minister. Therefore, the CSA is not dedicated only to the production of foresight studies. Furthermore, within its futures thinking activities, only a small part is related to environmental issues.</p> <p>The FSM is dedicated only to the production and diffusion of sustainable development foresight studies.</p>
Actors	<p>The elaboration of foresight studies in France has always been open to the consultation of the actors concerned and to the public at large. However, it is worth noting that the <i>Grenelle de l'environnement</i> has in a way institutionalised this consultation process.</p> <p>The CSA mainly works with its own public experts or public research centres, for example with the National Centre of Scientific Research (<i>Centre national de la recherche scientifique</i>) and does not work with external subcontractors.</p> <p>The FSM works with its own experts on environmental foresight studies and also works with external contractors.</p>
Perceived institutional need	<p>As mentioned above, environmental foresight studies within the French Government were not very connected to decision-makers and were not within an established governmental structure. Nowadays, the FSM is a department dedicated to foresight studies within the Delegation of Sustainable Development, which is a very strategic department as previously mentioned.</p> <p>This shows that the French Government is willing to have a strong pole dedicated to foresight studies related to sustainable development. It considers that this department shall support and guide the action of the government on sustainable development matters. The General Commissioner-General for Sustainable Development considers that foresight studies are crucial since the notion of long-term impact is enshrined in the concept of sustainable development. He also considers that foresight studies shall help people to change their behaviour by showing them the long-term consequences of their everyday acts.</p>

Country: France		Dominique de Villepin, prime minister in 2006, replaced the General Commission of Planning (Commissariat général du plan), by the CSA. He argued that the logic of planning of the General Commission of Planning was not appropriate for the current more and more open and complex society. He mentioned that governmental action, in these uncertain times was subject to very fast evolution and should, thus, be based on an accurate and precise analysis of globalisation and a better understanding of the evaluation of society.
2. Institutional structure for environmental policymaking	Relevant government departments, ministers, agencies, etc.	<p>The Foresight Studies Mission (FSM) is part of the Ministry of Ecology, Energy, Sustainable Development and Territorial Planning (MEESDTP). It is located within the Delegation of Sustainable Development (<i>Délégation au développement durable</i>). This delegation is a department of the General Commissariat of Sustainable Development (<i>Commissariat général au développement durable</i>) in charge of the strategic choices of the MEESDTP on priority and cross-cutting issues relating to sustainable development. It is also responsible for monitoring the implementation of the <i>Grenelle de l'environnement</i>. The Delegation of Sustainable Development also has the mission to promote the integration of sustainable development in the policies of the other ministries. The FSM is thus well integrated to the MEESDTP decision-making process.</p> <p>The CSA is affiliated to the Prime Minister's Office and is under the control of the Secretary of State for Foresight Studies and the Development of E-economy (<i>Secrétaire d'Etat chargée de la prospective et du développement de l'économie numérique</i>).</p>
3. Foresight/scenario culture traditions	Approach to futures thinking	<p>Until the end of the 1990s, the role of environmental foresight studies in the French Government was to bring new environmental issues to the agenda. Most of the foresight studies were explorative and were not really connected to the decision-making process. Since then, foresight studies have been much more integrated into the decision-making process. Environmental studies are now considered technocratic tools that give direction to policymakers' decisions. Thus, they are much more normative foresight studies. It is, however, worth mentioning that the Commissioner-General for Sustainable Development wants to enhance two types of environmental foresight studies:</p> <ul style="list-style-type: none"> • foresight studies directly dedicated to the decision-making process, • more explorative foresight studies with very long-term environmental scenarios.
	Thematic or issue	<p>Most of the foresight studies are very issue-specific, for example:</p> <ul style="list-style-type: none"> • <i>The vehicle for all in 2030</i> (April 2009), directed by Jean Syrota, • <i>The State-imposed value of carbon in 2050</i> (June 2008), directed by Alain Quinet, • <i>French energy perspectives 2020–2050</i>, directed by Jean Syrota. <p>Large-scale projects such as <i>France 2025</i> are non-sectoral and cover several domains (globalisation, production, creation, living together, risks and protection, rare resources, technology and daily living, state and public services).</p>
4. Summary of programme(s) as a whole, including within agencies		<p>In France, foresight studies departments have been more and more integrated into the decision-making process. Some public officers are now exclusively in charge of the production and the diffusion of environmental foresight studies for policymakers (FSM). Both the CSA and the FSM are situated very close to the decision-making process within the governmental institutional structure. The FSM is under the umbrella of the Commissioner-General for Sustainable Development which is in charge of the strategic choices related to sustainable development policies of the MEESDTP. The CSA is directly affiliated to the Prime Minister under the control of the new Secretary of State for Foresight Studies and the Development of E-economy.</p>

Country: France

The CSA has much greater financial resources than the FSM. However, the CSA is not only in charge of the promotion and diffusion of foresight studies dealing with sustainable development issues. In fact, since it is a generalist institution whose objective is to assist the government in defining and implementing its economic, social, environmental and cultural policies, the production of environmental foresight studies only represents a small part of its activities.

Environmental studies produced by these two organisations tend to be more focused on intertwined sustainable development issues than on strictly environmental matters. For example, there has been no foresight study on biodiversity, water or waste.

Both the CSA and the FSM are willing to diffuse and publish all their foresight studies. They consider that foresight studies should not only be a technocratic tool for decision-makers but that they alert the public at large and also have an educative purpose.

Both the CSA and the FSM are taking into account in the production of their foresight studies the participative approach of 'the Grenelle de l'environnement'. They consider that this openness towards civil society, the academic world and the private sector brings new ideas and more creativity and it is also a guarantee of independence.

The work of the CSA and the FSM is not reviewed by any external institution; the control is only internal (by the Prime Minister through the Secretary of State for Foresight Studies and the Development of E-economy (CSA) or by the Commissioner-General for Sustainable Development (FSM)).

There is an important coordination between the different departments of foresight studies within the French Government. They meet every month at the CSA and exchange information. The CSA does not direct the work of the other foresight studies departments. The CSA and the FSM are thus in a horizontal relationship. Some have pointed out that there might be some overlaps of competences between them.

Overall, since environmental and sustainable development issues are becoming important topics at French Government level, foresight studies are more and more considered a useful tool to implement environmental and sustainable development policies. According to the Commissioner-General for Sustainable Development, foresight studies are useful in this uncertain world since they provide some long-term objectives for by the policymakers. Furthermore, he added that foresight studies are an essential component of sustainable development policies. Indeed, these policies should be based, by definition, on their long-term impact.

It has, however, been underlined that without additional sources of financing, foresight studies in the French Government can only be based on already existing information. Foresight studies based on existing information do not explore new areas of research and are thus less avant-garde. It is more difficult to bring new environmental issues to the agenda if foresight studies are only produced from the collation of existing information.

Appendix 2

Examples of futures studies

Country: France		
Futures studies institution: Council of Strategic Analysis		
1. Description/ characteristics of future study	Examples of specific studies	France 2025 (<i>specifically the part concerning the environment on scarce resources</i>)
	Exploratory/ normative?	<p>France 2025 is both an explorative and normative foresight study</p> <p>It foresees long-term trends and provides some solution to avoid these trends.</p> <p><i>Exploratory:</i> For example, it mentions that climate change might instigate some infectious diseases, cause the displacement of many climate change refugees and that 5 % of healthcare costs shall be attributed to the degradation of the environment.</p> <p><i>Normative:</i> In order to fight climate change, France 2025 proposes several options:</p> <ul style="list-style-type: none"> • energy efficiency, • research and development, • strengthening of the EU emission trading scheme, • cautious development of renewable energy, • development of nuclear power plants.
	Qualitative/ quantitative?	France 2025 has both a quantitative and a qualitative approach.
	Thematic focus?	<p>France 2025 covers 10 main challenges:</p> <ul style="list-style-type: none"> • the challenge of the world stability, • the challenge of French influence, • the challenge of sustainable development, • the challenge of personal accomplishment at work, • the challenge of competition and of attractiveness, • the challenge of innovation and creativity, • the challenge of solidarity, • the challenge of democracy and individual freedom, • the challenge of insertion in society, • the challenge of public services.
	Specific issue focus?	<p>Eight different groups participated in the production of <i>France 2025</i>. The group on scarce resources and the environment have focused on the following issues:</p> <ul style="list-style-type: none"> • energy and Climate change, • raw mineral material economics, • French agriculture (how to produce and respect the environment), • biodiversity threatened by economic development.
	Spatial/ temporal scale	France 2025 has a global approach to the subjects considered. However, the solution or recommendations of this foresight study mainly deal with France or Europe.
	Ad hoc/ongoing established futures process?	No
	Sector/cross-sector-based?	This study is cross-sector based.

Country: France		
	Science-based/ multiple stakeholders?	Multiple stakeholders were working on this issue, informed by researchers to establish baseline and potential scenarios.
2. Original purpose and application	For what purpose?	France 2025 is a France's strategic assessment project, which aim is to identify different future development scenarios for the country and to recommend winning strategies.
	Requested by a specific entity?	France 2025 was requested by the prime minister and by Eric Besson, the former Secretary of State for Foresight Studies and the Development of E-economy.
	How used?	The foresight study was released in January 2009; it is therefore not possible to ascertain how this foresight was used.
	By whom?	This foresight study will probably be used by the prime minister and by all the Ministries that have an interest in that futures study.
	3. Outcomes (immediate and long term)	Where and how used in policy (if at all)
4. Evaluation	Any formal evaluation of effectiveness or updates	No
	Success factors (drivers)	A robust strategy of communication and a very strong participative approach with the involvement of the private sector, civil society, academic world, eminent personalities (Jacques Delors, for instance) and the public in general.
	Barriers to success?	None identified
5. References	The various France 2025 reports are available on the website of the CSA (http://www.strategie.gouv.fr/rubrique.php3?id_rubrique=239).	

Country: France		
Futures organisation: Former Ministry of Ecology and Ministry of Agriculture (2006)		
1. Description/ characteristics of futures study	Examples of specific studies	Agriculture, environment, and territories: four scenarios toward 2025
	Exploratory/ normative?	This foresight study is mainly exploratory. It does not provide any strategy or recommendation to policymakers.
	Qualitative/ quantitative?	This foresight study is mainly qualitative and provides four different scenarios. <ul style="list-style-type: none"> • The efficient agro-environment: in this scenario, France's priority is to stay a leader in the agro-industry. • Dual agriculture: an environmental frontier: this scenario is based on the assumptions that there might not be public resistance to environmental impacts of a very productive agriculture. • Europe of regions: a patchwork of contrasted environmental results: this scenario is based on a strong role played by Europe in the agriculture domain through the funding of regions. • An agriculture with high environmental performance: in this scenario, environmental expectations are high in 2025 in Europe and they represent an important crucial economic stimulus, high environmental performance agriculture is thus more and more developed.
	Thematic focus?	The focus of the foresight study is the impacts of agriculture production in Europe and in France on the environment. Depending on the different scenarios proposed by this foresight study, these impacts differ.
	Specific issue focus?	
	Spatial/ temporal scale	France/Europe 2025

Country: France	
	<p>Ad hoc/ongoing established futures process? Not identified</p> <p>Sector/cross-sector-based? This foresight study is sector-based since it only deals with the impact of agriculture on the environment in France and, more generally, in Europe.</p> <p>Science-based/multiple stakeholders? This foresight study was based on the contribution of experts in the various domains of the agricultural world: there were 30 experts who met in Bourgogne for a workshop.</p>
2. Original purpose and application	<p>For what purpose?</p> <p>The objective of this foresight study was to provide several illustrations of the impact on the environment of agriculture production depending on the possible evolution of agriculture in France and Europe.</p>
	<p>Requested by a specific entity?</p> <p>This was requested by the former Ministry of Ecology and the Ministry of Agriculture.</p>
	<p>How used?</p> <p>Since it is an exploratory foresight study, it does not aim to be directly used in the decision-making process.</p>
	<p>By whom?</p> <p>It might have been used by the Ministry of Agriculture and its decentralised services.</p>
3. Outcomes (immediate and long term)	<p>Where and how used in policy, if at all Unclear</p>
4. Evaluation	<p>Any formal evaluation of effectiveness or updates No</p>
	<p>Success factors/drivers Not identified</p>
	<p>Barriers to success Not identified</p>
5. References	<p>The executive summary of this foresight study is available online (http://www.ecologie.gouv.fr/Agriculture-et-environnement.html).</p> <p>Agriculture, Environment, and Territories: Four scenarios toward 2025 (<i>Agriculture et environnement: quatre scénarios à l'horizon 2025</i>) by Xavier Poux (2006) is published at la documentation française.</p>

Country: France	
Futures programme: Council of Seine Estuary (Conseil de l' Estuaire de la Seine)	
1. Description/ characteristics of future study	<p>Examples of specific studies Foresight studies on the Seine Estuary in 2025 (<i>Demarche prospective à l'horizon 2025 sur l'estuaire de la Seine</i>)</p>
	<p>Exploratory/normative This foresight study is normative. It provides some recommendations to policymakers based on the outcomes of the different scenarios.</p>
	<p>Qualitative/quantitative This foresight study is mainly qualitative providing four scenarios:</p> <ul style="list-style-type: none"> • baseline scenario (no action taken), • voluntary restoration of environmental services, • Major economic crisis, • local initiative.
	<p>Thematic focus? Specific issue focus? Environmental focus</p> <p>The restoration of the environmental services of the Seine Estuary.</p>
	<p>Spatial/temporal scale This foresight study is geographically restricted to the Seine Estuary. The temporal scale is 2025.</p>
	<p>Ad hoc/ongoing established futures process? Not identified</p>

Country: France		
	Sector/cross-sector-based?	This is a sector-based approach. This foresight study is only considers possible futures of the environmental services of the Seine Estuary.
	Science-based/multiple stakeholders?	This foresight study involved both scientists and stakeholders. A group of stakeholders was established during this foresight study: they were constantly consulted during the elaboration of the foresight study. The group was composed of people representing different interests related to the Seine Estuary (e.g. environmental NGO, oil refinery, Chamber of Agriculture, tourism organisations, harbour, natural parks). A group of experts from different public institutions (e.g. water agencies) was also put in place and provided some technical advice during the study.
2. Original purpose and application	For what purpose?	The main aim of this foresight study was to find solutions for the progressive restoration of the environmental services of this estuary, taking into account the different interests at stakes in this specific ecological area. In other words, among the possible scenarios, which one is the most realistic and probable for the achievement of the ecological restoration of the estuary?
	Requested by a specific entity?	This foresight study was requested by the Council of the Seine Estuary (Conseil de l'Estuaire de la Seine): this institution is in charge of monitoring the coherence of policies related to the Seine Estuary.
3. Outcomes (immediate and long term)	Where and how used in policy, if at all	The Council of the Seine Estuary has decided to take measures in accordance with the 'local initiatives' scenario of the foresight study.
4. Evaluation	Any formal evaluation of effectiveness or updates	No information available
	Success factors/drivers	The stakeholder participation process was a real success: local actors became more aware of the overall functioning of the estuary ecosystem during the elaboration of the foresight study. They realised that the restoration of the ecological services of the estuary could also have major positive impacts on the economic and social activities of this area and that such restoration could be possible.
	Barriers to success	No information available
5. References	Conseil de l'estuaire de la Seine, Démarche prospective à l'horizon 2025 sur l'estuaire de la Seine (http://www.eau-seine-normandie.fr/fileadmin/mediatheque/Expert/Etudes_et_Syntheses/prospective_estuaire_Seine_2004.pdf).	

European Environment Agency

Annex 3 — France country case study

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